



DOC NUMBER:

569-DB7B-AIC-731-004

CLIENT NUMBER:

PRD-AIC-DSH-043

CLIENT:

TAKEDA/BAXALTA

PROJECT:

BURITI EPCVM PROJECT

DATA SHEET

AUTOMATED DIAPHRAGM VALVE

2	28JAN2022	ISSUED FOR CONSTRUCTION CONSIDERIG COMMENTS	MAB	MAF	RSP
1	17NOV2021	ISSUED FOR CONSTRUCTION UPDATED AS PER NOTES	MAB	MAF	RSP
0	17SEP2021	ISSUED FOR CONSTRUCTION	MAB	MAF	RSP
A	31MAR2021	60% DD ISSUE	MAB	MAF	RSP
REV	DATE	DESCRIPTION	EXEC	CHECK	APPROV

NUMBER: 569-DB7B-AIC-731-004

CLIENT NR:

PRD-AIC-DSH-043

TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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DOCUMENT REVIEW CONTROL

Rev.	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	X	X	X	41	X	X	X	X	X	X	81	X	X	X	X	X	X
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AUTOMATED DIAPHRAGM VALVE

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DOCUMENT REVIEW CONTROL

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Page							Page							Page						
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122	X	X	X	X	X	X	162	X	X	X	X	X	X	202						
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TITLE

AUTOMATED DIAPHRAGM VALVE

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DOCUMENT REVIEW CONTROL

Rev.	A	0	1	2	3	4	Revision	A	0	1	2	3	4	Revision	A	0	1	2	3	4
Page							Page							Page						
241	X	X	X	X	X	X	281	X	X	X	X	X	X	321	X	X	X	X	X	X
242	X	X	X	X	X	X	282	X	X	X	X	X	X	322						
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TITLE

SHEET:
5 of 116**AUTOMATED DIAPHRAGM VALVE**REV.:
2**REFERENCE DOCUMENTS**

7B-Z-0-0-01

PROCESS INDEX DRUG SUBSTANCE BUILDING 7B

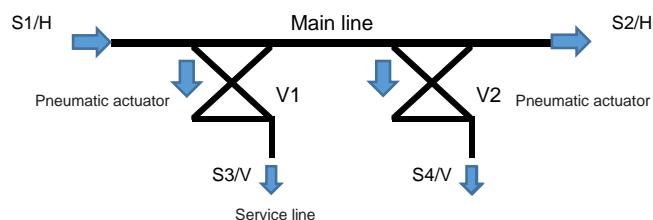
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INTEGRATED PROJECT SERVICES - INSTRUMENT SUGGESTED SUPPLIER LIST

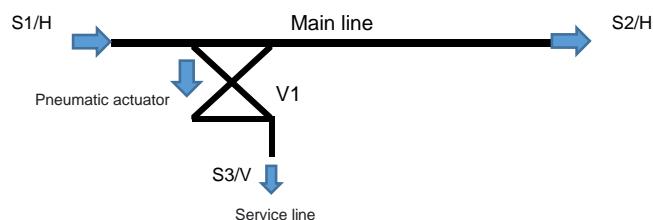
GENERAL NOTES

- 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 - For all instruments, they must be classified as a type of protection compatible with the priority of the area. If the enclosure requires certificates regarding the type and degree of protection, both proofs must be explained in the same certificate. The certificates must be issued by INMETRO or accredited body.
- 8 - 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



Main line: S1/H
 Service line: S3/V
 Return line: S2/V
 Sanitary /valve ZERO DEAD-LEG type
 "T-VALVE BLOCK" - 4 way / 2 valves



- 9- The manufacturer must supply two actuators and accessories, one for the tag 7B-XV-XXXXXXA and the other for 7B-XV-XXXXXB
- 10- Solenoid valve coupled to the valve, 24 Vdc supply. / Degree of Protection IP66
- 11- The regulating filter is a mandatory accessory and its material must be suitable for the fluid and local environmental conditions. The regulating filter must be fitted with a pressure gauge and a coalescing filter.
- 12- The actuation of the valve will be through a block of solenoid valves installed in the control panel
- 13- All instruments in this FD must meet the requirements of a 4.0 industry
- 14- See diaphragm valve arrangement diagram attached.

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 NOTE 14 3 - INSTRUMENTS CANCELLED:XV-570101 / XV-570114 / XV-571121 / XV-570122 / XV-570201 / XV-570221 / XV-570222 / XV-570224 / XV-590101 / XV-590114 / XV-590121 / XV-590122 / XV-590123 / XV-590177 / XV-590117 / XV-590118 / XV-590115 / XV-590201 / XV-590214 / XV-590221 / XV-590223 / XV-590217 / XV-590218 / XV-590219 / XV-340201 / XV-340101 / XV-370107 / XV-370108 / XV-370121 / XV-370135 / XV-770235 / XV-630202 / XV-630206 / XV-630102 / XV-570125

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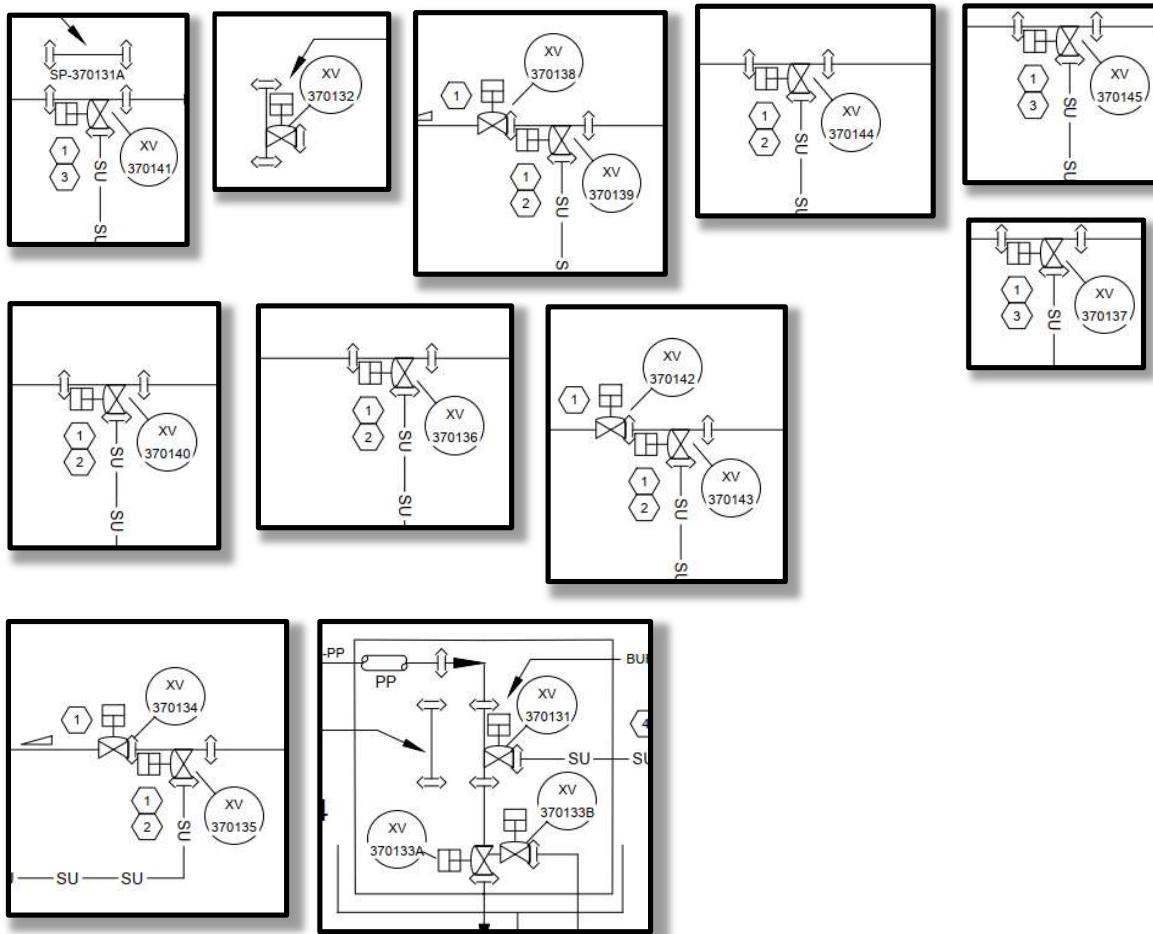
AUTOMATED DIAPHRAGM VALVE

REV.:

2

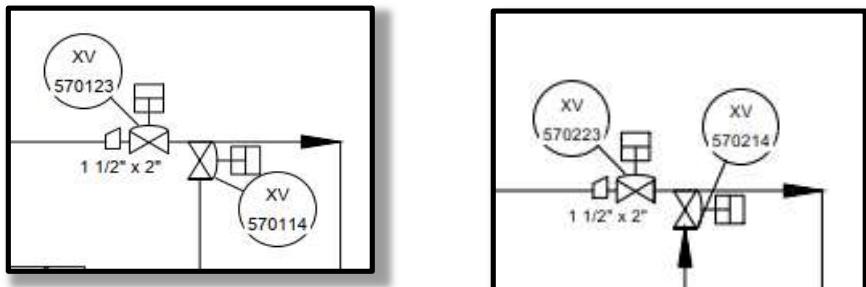
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7B-Z-0-2-37



7B-Z-0-2-21

7B-Z-0-2-21



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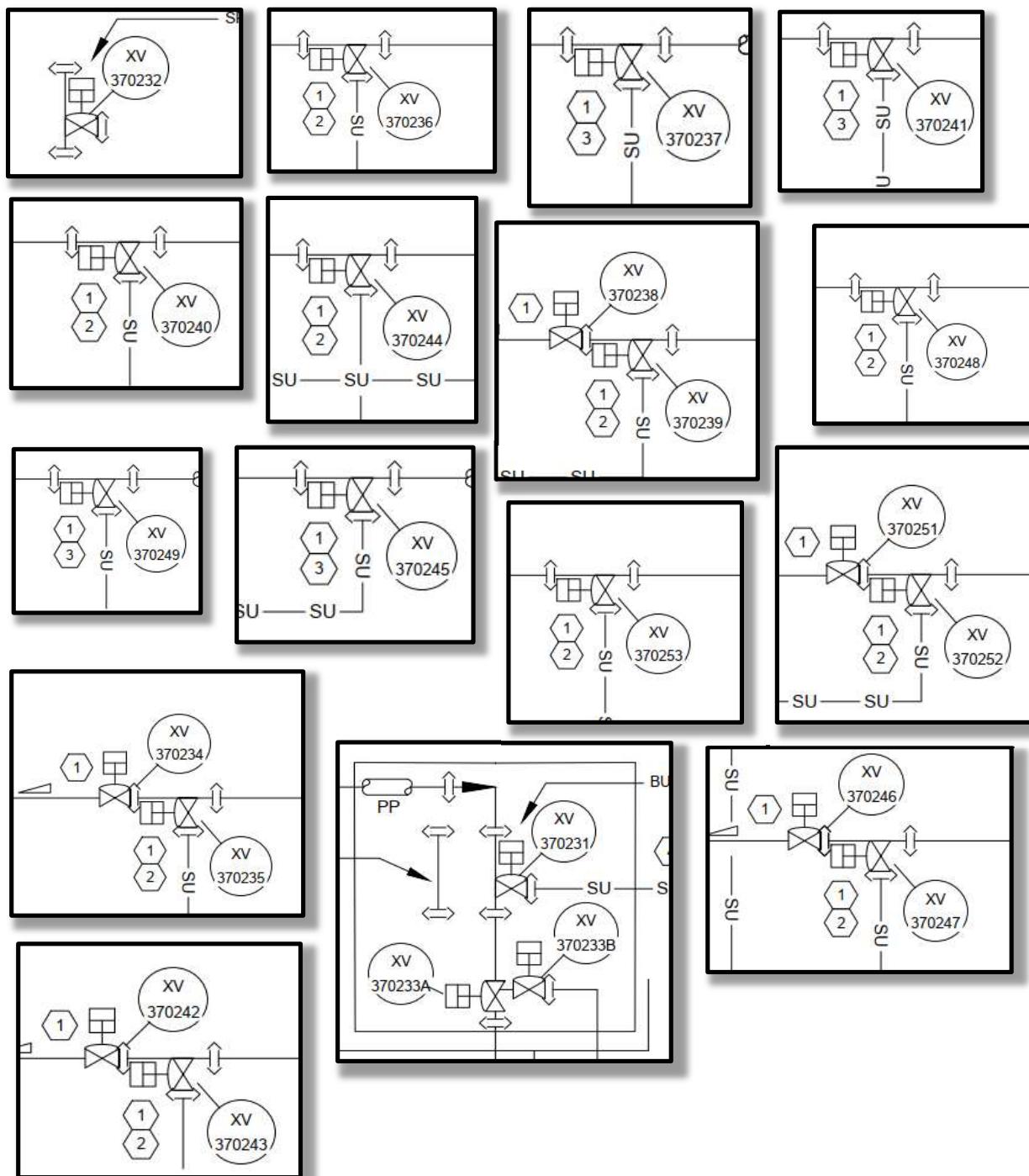
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AUTOMATED DIAPHRAGM VALVE

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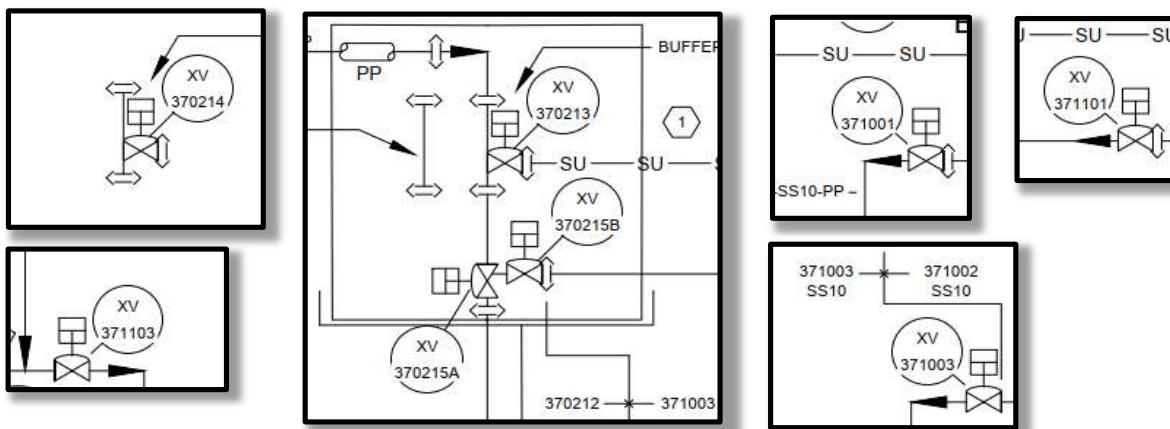
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AUTOMATED DIAPHRAGM VALVE

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REFERENCE DOCUMENTS

7B-Z-0-2-40

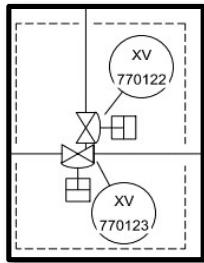
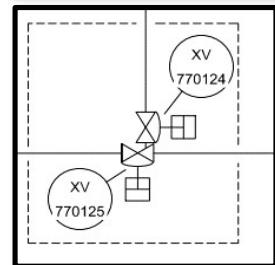
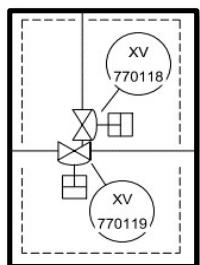
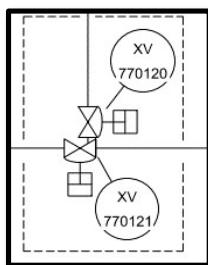
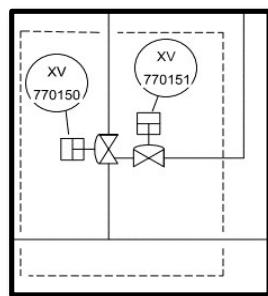
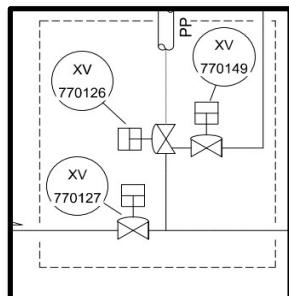
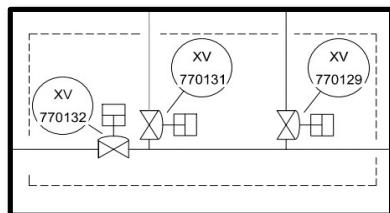


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AUTOMATED DIAPHRAGM VALVESHEET:
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2**REFERENCE DOCUMENTS****7B-Z-0-2-44**

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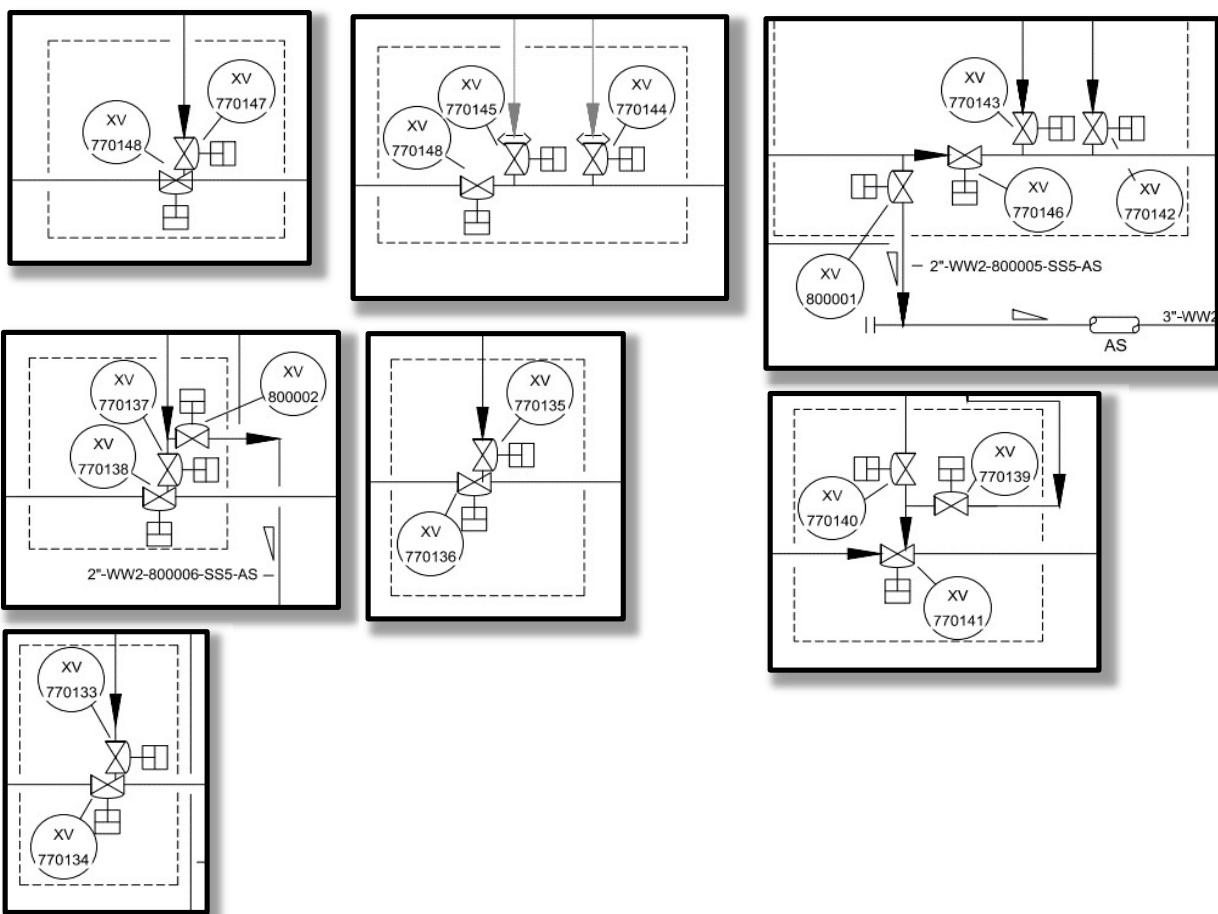
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AUTOMATED DIAPHRAGM VALVE

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REFERENCE DOCUMENTS

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NUMBER: 569-DB7B-AIC-731-004

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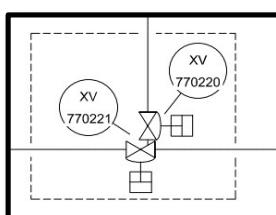
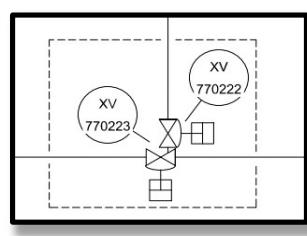
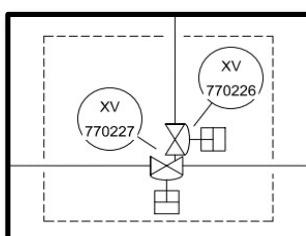
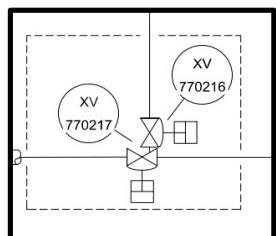
TITLE

AUTOMATED DIAPHRAGM VALVE

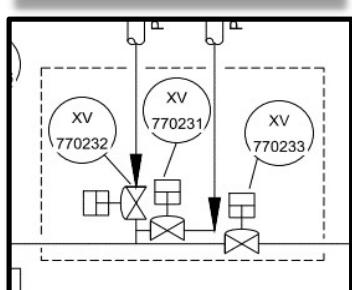
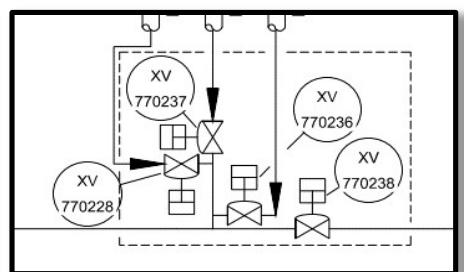
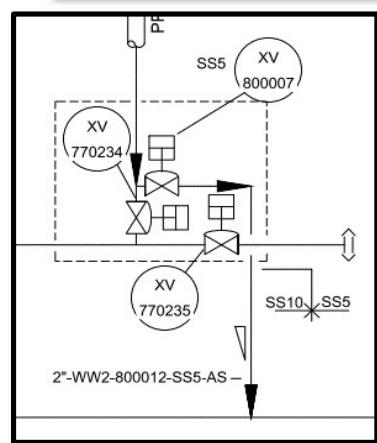
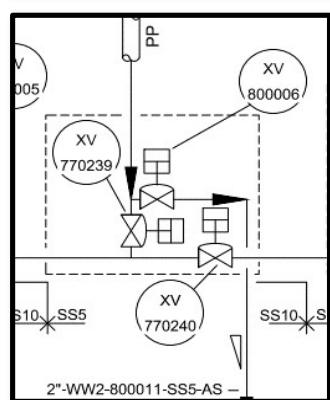
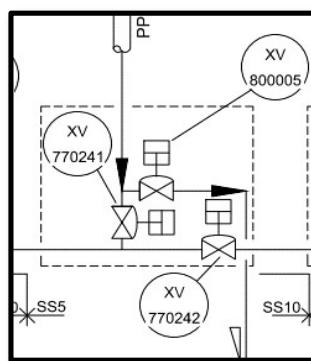
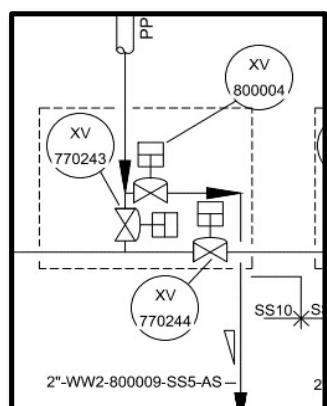
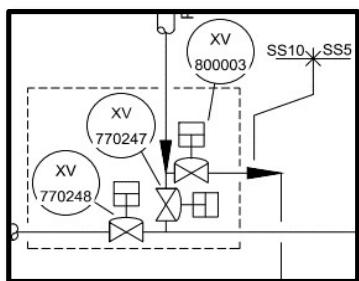
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2

REFERENCE DOCUMENTS

7B-Z-0-2-47



7B-Z-0-2-48



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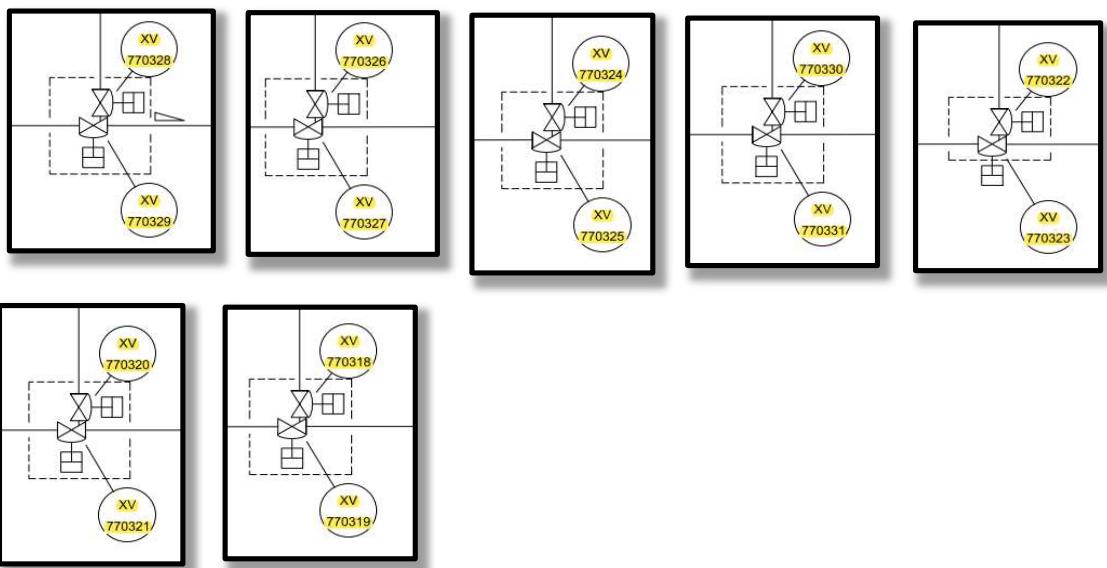
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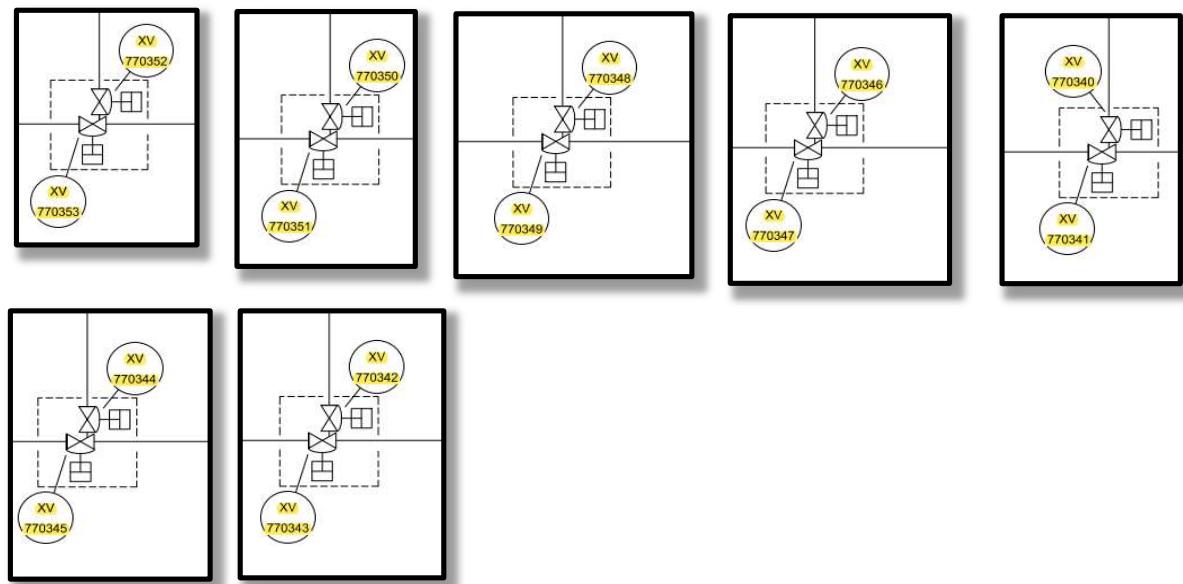
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12 of 116REV.:
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7B-Z-0-2-50



7B-Z-0-2-51



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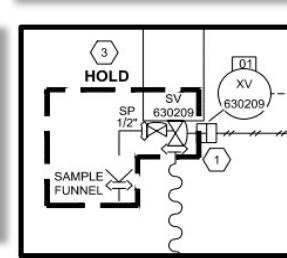
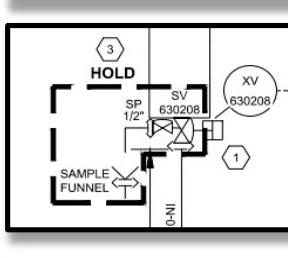
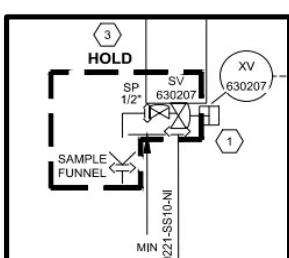
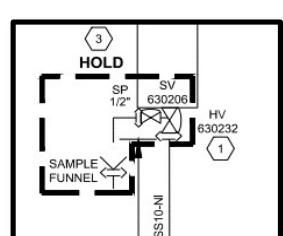
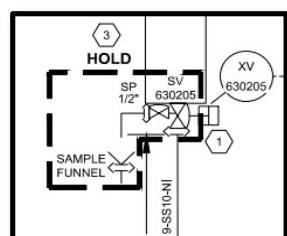
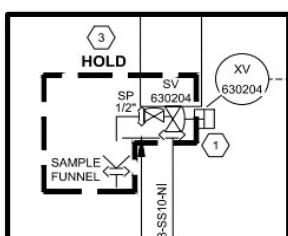
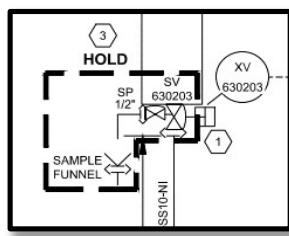
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AUTOMATED DIAPHRAGM VALVE

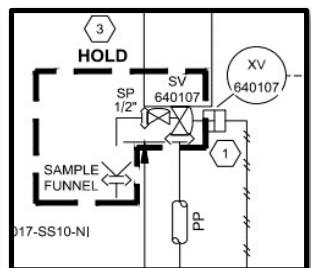
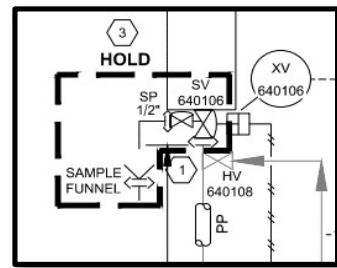
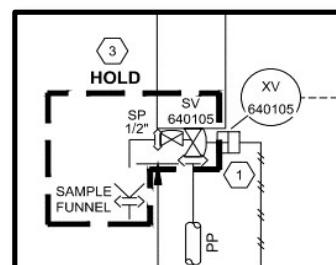
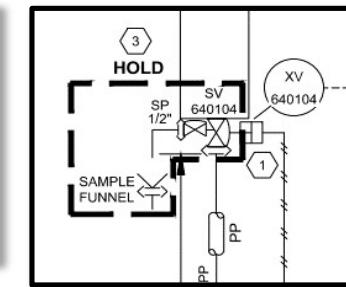
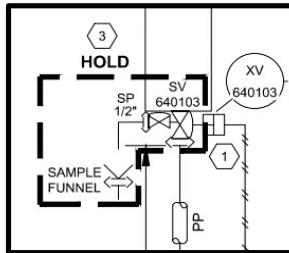
SHEET:
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REFERENCE DOCUMENTS

7B-Z-0-2-58



7B-Z-0-2-61



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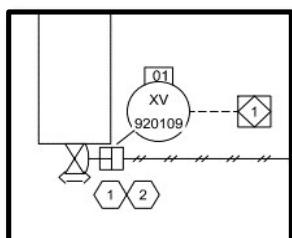
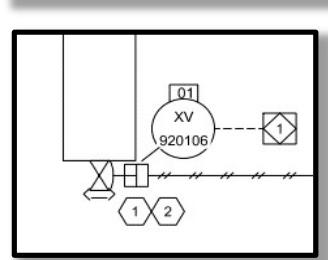
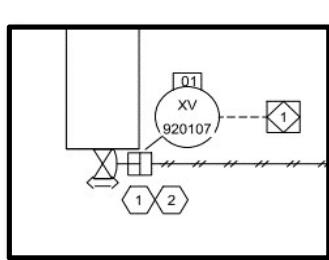
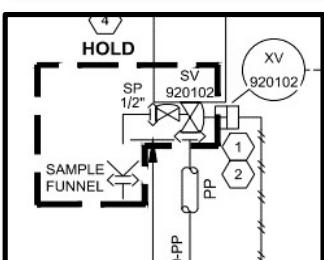
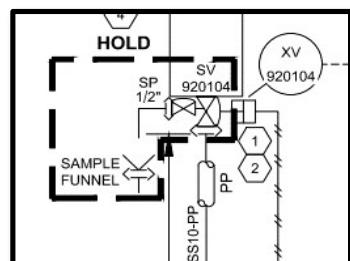
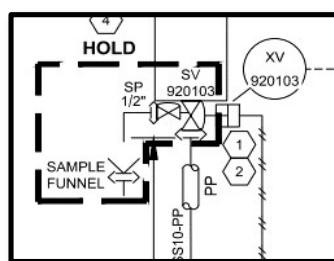
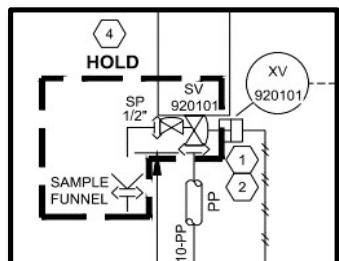
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AUTOMATED DIAPHRAGM VALVE

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2

REFERENCE DOCUMENTS

7B-Z-0-2-62



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AUTOMATED DIAPHRAGM VALVE

 SHEET:
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 REV.:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-570114 / 7B-XV-570123					
	2	SERVICE	CIP SYSTEM N°1					
	3	P&ID	7B-Z-0-2-21					
	4	MAIN LINE Ø	SERVICE LINE Nº	2"	2"-SFI-570146-SS10-HC			
	5	VALVE TYPE	DIAPHRAGM					
	6	AREA CLASSIFICATION	NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION	IP-65					
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	2" PL / 2" PL / 2" PL					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1PL/ S2PL / S3PL					
	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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
ACCESSORIES	32	SOLENOID VALVE	-					
	33	ELECTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS	PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	80		
	PROJECT FLOW			-	-	-		
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C		
	DENSITY @ OPERATING CONDITION				- kg/m³			
	VISCOSITY @ OPERATING CONDITION				- Cp			
	FLUID CONDUCTIVITY				- μS/cm²			
	INCROSTATION			-	-	-		
	SUSPENDED SOLIDS (%)			-	-	-		
	MAXIMUM LOSS OF LOAD ALLOWED			-	-	-		
	MANUFACTURER		GEMU OR SIMILAR					
	MODEL							



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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-570214 / 7B-XV-570223					
	2	SERVICE	STEAM FROM TQ-5702					
	3	P&ID	7B-Z-0-2-22					
	4	MAIN LINE Ø	SERVICE LINE Nº	2"	2"-SFI-570246-SS10-HC			
	5	VALVE TYPE	DIAPHRAGM					
	6	AREA CLASSIFICATION	NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION	IP-65					
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	2" PL / 2" PL / 2" PL					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1PL/ S2PL / S3PL					
	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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT	LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	80		
	PROJECT FLOW			-				
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g	°C			
	DENSITY @ OPERATING CONDITION			-	kg/m³			
	VISCOSITY @ OPERATING CONDITION			-	Cp			
	FLUID CONDUCTIVITY			-	μS/cm²			
	INCROSTATION			-				
	SUSPENDED SOLIDS (%)			-				
	MAXIMUM LOSS OF LOAD ALLOWED			-				
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							



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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370133A/B / 7B-XV-370131					
	2	SERVICE	CIP SYSTEM Nº3 RETURN					
	3	P&ID	7B-Z-0-2-37					
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370111-SS10-PP	3/4"-CIP3R-770321-SS10-PP			
	5	VALVE TYPE	DIAPHRAGM					
	6	AREA CLASSIFICATION	NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION	IP-65					
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6					
BODY	9	TYPE BODY	ON-OFF / ZERO DEAD-LEG					
	10	BODY SIZE	3/4" TC / Ø3/4" TC / 3/4"TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-TC/ 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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
		FLUID	PHYSICAL STATUS	PRODUCT		LIQUID		
		MINIMUM FLOW	NORMAL	MAXIMUM	-	-		
SERVICE		MINIMUM PRESSURE	NORMAL	MAXIMUM	-	1		
		MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	120		
		PROJECT FLOW			-	-		
		DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g	°C		
		DENSITY @ OPERATING CONDITION			-	kg/m³		
		VISCOSITY @ OPERATING CONDITION			-	Cp		
		FLUID CONDUCTIVITY			-	µS/cm²		
		INCROSTATION			-	-		
		SUSPENDED SOLIDS (%)			-	-		
		MAXIMUM LOSS OF LOAD ALLOWED			-	-		
		MANUFACTURER			GEMU OR SIMILAR			
		MODEL						



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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370134 / 7B-XV-370135			
	2	SERVICE	TO CATION EXCHANGE CHROMATOGRAPHY			
	3	P&ID	7B-Z-0-2-37			
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370130-SS10-CC	3/4"-SFIC-370133-SS10-PP	
	5	VALVE TYPE	DIAPHRAGM			
	6	AREA CLASSIFICATION	NOT CLASSIFIED			
	7	ENCLOSURE CLASSIFICATION	IP-65			
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6			
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG			
	10	BODY SIZE	3/4" TC / 3/4" TC			
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L			
	12	END CONNECTION, AND TYPE.	S1/H-TC/ S2/H-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			
HANDLE	19	TYPE	-			
	20	COLOR	-			
	21	LOCKING YES / NO	-			
	22	EXTENDED	-			
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-			
	31	ENCLOSURE	MANUFACTURER STANDARD			
	32	SOLENOID VALVE	-			
ACCESSORIES	33	ELETTRICAL CONNECTION	-			
	34	VOLTAGE	-			
	35	INDICATION	-			
	36	LIMIT SWITCH OPEN	-			
	37	LIMIT SWITCH CLOSED	-			
	38	MOUNTING KIT	-			
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120
	PROJECT FLOW					-
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C
	DENSITY @ OPERATING CONDITION				kg/m³	
	VISCOSITY @ OPERATING CONDITION				Cp	
	FLUID CONDUCTIVITY				μS/cm²	
	INCROSTATION					-
	SUSPENDED SOLIDS (%)					-
	MAXIMUM LOSS OF LOAD ALLOWED					-
	MANUFACTURER	GEMU OR SIMILAR				
	MODEL					



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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370136			
	2	SERVICE	TO CATION EXCHANGE CHROMATOGRAPHY			
	3	P&ID	7B-Z-0-2-37			
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370133-SS10-PP		
	5	VALVE TYPE	DIAPHRAGM			
	6	AREA CLASSIFICATION	NOT CLASSIFIED			
	7	ENCLOSURE CLASSIFICATION	IP-65			
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6			
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG			
	10	BODY SIZE	3/4" PL / Ø2 TC			
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L			
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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			
HANDLE	19	TYPE	-			
	20	COLOR	-			
	21	LOCKING YES / NO	-			
	22	EXTENDED	-			
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-			
	31	ENCLOSURE	MANUFACTURER STANDARD			
	32	SOLENOID VALVE	-			
ACCESSORIES	33	ELECTRICAL CONNECTION	-			
	34	VOLTAGE	-			
	35	INDICATION	-			
	36	LIMIT SWITCH OPEN	-			
	37	LIMIT SWITCH CLOSED	-			
	38	MOUNTING KIT	-			
		FLUID	PHYSICAL STATUS	PRODUCT		LIQUID
		MINIMUM FLOW	NORMAL	MAXIMUM	-	-
SERVICE		MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-
		MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	1
		PROJECT FLOW			-	120
		DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g	°C
		DENSITY @ OPERATING CONDITION			-	kg/m³
		VISCOSITY @ OPERATING CONDITION			-	Cp
		FLUID CONDUCTIVITY			-	µS/cm²
		INCROSTATION			-	-
		SUSPENDED SOLIDS (%)			-	-
		MAXIMUM LOSS OF LOAD ALLOWED			-	-
		MANUFACTURER		GEMU OR SIMILAR		
		MODEL				



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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370137					
	2	SERVICE	TO CATION EXCHANGE CHROMATOGRAPHY					
	3	P&ID	7B-Z-0-2-37					
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370130-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6					
	8	CERTIFICATES						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / Ø2 TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID		
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW					-		
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C		
	DENSITY @ OPERATING CONDITION				kg/m³			
	VISCOSITY @ OPERATING CONDITION				Cp			
	FLUID CONDUCTIVITY				μS/cm²			
	INCROSTATION					-		
	SUSPENDED SOLIDS (%)					-		
	MAXIMUM LOSS OF LOAD ALLOWED					-		
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							



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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370138 / 7B-XV-370139			
	2	SERVICE	TO ANION EXCHANGE CHROMATOGRAPHY			
	3	P&ID	7B-Z-0-2-37			
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370131-SS10-CC	3/4"-SFIC-370134-SS10-PP	
	5	VALVE TYPE	DIAPHRAGM			
	6	AREA CLASSIFICATION	NOT CLASSIFIED			
	7	ENCLOSURE CLASSIFICATION	IP-65			
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6			
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG			
	10	BODY SIZE	3/4" PL / 3/4" TC			
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L			
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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			
HANDLE	19	TYPE	-			
	20	COLOR	-			
	21	LOCKING YES / NO	-			
	22	EXTENDED	-			
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-			
	31	ENCLOSURE	MANUFACTURER STANDARD			
	32	SOLENOID VALVE	-			
ACCESSORIES	33	ELETTRICAL CONNECTION	-			
	34	VOLTAGE	-			
	35	INDICATION	-			
	36	LIMIT SWITCH OPEN	-			
	37	LIMIT SWITCH CLOSED	-			
	38	MOUNTING KIT	-			
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120
	PROJECT FLOW					-
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C
	DENSITY @ OPERATING CONDITION				kg/m³	
	VISCOSITY @ OPERATING CONDITION				Cp	
	FLUID CONDUCTIVITY				μS/cm²	
	INCROSTATION					-
	SUSPENDED SOLIDS (%)					-
	MAXIMUM LOSS OF LOAD ALLOWED					-
	MANUFACTURER	GEMU OR SIMILAR				
	MODEL					



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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
22 of 116
REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370140					
	2	SERVICE	TO ANION EXCHANGE CHROMATOGRAPHY					
	3	P&ID	7B-Z-0-2-37					
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370131-SS10-CC	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6					
	8	CERTIFICATES						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / Ø??" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELECTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
		FLUID	PHYSICAL STATUS	PRODUCT		LIQUID		
		MINIMUM FLOW	NORMAL	MAXIMUM	-	-		
SERVICE		MINIMUM PRESSURE	NORMAL	MAXIMUM	-	1		
		MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	120		
		PROJECT FLOW			-	-		
		DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g	°C		
		DENSITY @ OPERATING CONDITION			-	kg/m³		
		VISCOSITY @ OPERATING CONDITION			-	Cp		
		FLUID CONDUCTIVITY			-	µS/cm²		
		INCROSTATION			-	-		
		SUSPENDED SOLIDS (%)			-	-		
		MAXIMUM LOSS OF LOAD ALLOWED			-	-		
		MANUFACTURER			GEMU OR SIMILAR			
		MODEL						



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AUTOMATED DIAPHRAGM VALVE

SHEET:
23 of 116
REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370141							
	2	SERVICE	TO ANION EXCHANGE CHROMATOGRAPHY							
	3	P&ID	7B-Z-0-2-37							
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370131-SS10-CC	DIAPHRAGM					
	5	VALVE TYPE	NOT CLASSIFIED							
	6	AREA CLASSIFICATION	IP-65							
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6							
	8	CERTIFICATES								
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	3/4" PL / Ø??" TC							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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							
HANDLE	19	TYPE	-							
	20	COLOR	-							
	21	LOCKING YES / NO	-							
	22	EXTENDED	-							
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
ACCESSORIES	33	ELECTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	-							
	37	LIMIT SWITCH CLOSED	-							
	38	MOUNTING KIT	-							
	FLUID		PHYSICAL STATUS		PRODUCT					
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-				
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1				
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120				
	PROJECT FLOW		-							
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g	°C					
	DENSITY @ OPERATING CONDITION				kg/m³					
	VISCOSITY @ OPERATING CONDITION				Cp					
	FLUID CONDUCTIVITY				μS/cm²					
	INCROSTATION				-					
	SUSPENDED SOLIDS (%)				-					
	MAXIMUM LOSS OF LOAD ALLOWED				-					
	MANUFACTURER			GEMU OR SIMILAR						
	MODEL									



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AUTOMATED DIAPHRAGM VALVE

SHEET:
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REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370142 / 7B-XV-370143			
	2	SERVICE	TO ANION EXCHANGE CHROMATOGRAPHY			
	3	P&ID	7B-Z-0-2-37			
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370135-SS10-PP	3/4"-BUF-370132-SS10-CC	
	5	VALVE TYPE	DIAPHRAGM			
	6	AREA CLASSIFICATION	NOT CLASSIFIED			
	7	ENCLOSURE CLASSIFICATION	IP-65			
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6			
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG			
	10	BODY SIZE	3/4 " / 3/4"			
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L			
	12	END CONNECTION, AND TYPE.	S1PL / S2TC / S3TC			
	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			
HANDLE	19	TYPE	-			
	20	COLOR	-			
	21	LOCKING YES / NO	-			
	22	EXTENDED	-			
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-			
	31	ENCLOSURE	MANUFACTURER STANDARD			
	32	SOLENOID VALVE	-			
ACCESSORIES	33	ELETTRICAL CONNECTION	-			
	34	VOLTAGE	-			
	35	INDICATION	-			
	36	LIMIT SWITCH OPEN	-			
	37	LIMIT SWITCH CLOSED	-			
	38	MOUNTING KIT	-			
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120
	PROJECT FLOW					-
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g		°C
	DENSITY @ OPERATING CONDITION				- kg/m³	
	VISCOSITY @ OPERATING CONDITION				- Cp	
	FLUID CONDUCTIVITY				- μS/cm²	
	INCROSTATION			-		-
	SUSPENDED SOLIDS (%)			-		-
	MAXIMUM LOSS OF LOAD ALLOWED			-		-
	MANUFACTURER	GEMU OR SIMILAR				
	MODEL					



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AUTOMATED DIAPHRAGM VALVE

SHEET:
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REV.:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370144			
	2	SERVICE	TO ANION EXCHANGE CHROMATOGRAPHY			
	3	P&ID	7B-Z-0-2-37			
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370132-SS10-CC	Ø?	DIAPHRAGM
	5	VALVE TYPE	NOT CLASSIFIED			
	6	AREA CLASSIFICATION	IP-65			
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6			
	8	CERTIFICATES				
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG			
	10	BODY SIZE	3/4" PL / Ø? TC			
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L			
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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			
HANDLE	19	TYPE	-			
	20	COLOR	-			
	21	LOCKING YES / NO	-			
	22	EXTENDED	-			
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-			
	31	ENCLOSURE	MANUFACTURER STANDARD			
	32	SOLENOID VALVE	-			
ACCESSORIES	33	ELECTRICAL CONNECTION	-			
	34	VOLTAGE	-			
	35	INDICATION	-			
	36	LIMIT SWITCH OPEN	-			
	37	LIMIT SWITCH CLOSED	-			
	38	MOUNTING KIT	-			
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120
	PROJECT FLOW					-
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C
	DENSITY @ OPERATING CONDITION				kg/m³	
	VISCOSITY @ OPERATING CONDITION				Cp	
	FLUID CONDUCTIVITY				μS/cm²	
	INCROSTATION					-
	SUSPENDED SOLIDS (%)					-
	MAXIMUM LOSS OF LOAD ALLOWED					-
	MANUFACTURER	GEMU OR SIMILAR				
	MODEL					



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AUTOMATED DIAPHRAGM VALVE

SHEET:
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2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370145			
	2	SERVICE	TO ANION EXCHANGE CHROMATOGRAPHY			
	3	P&ID	7B-Z-0-2-37			
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370132-SS10-CC	Ø?	DIAPHRAGM
	5	VALVE TYPE	NOT CLASSIFIED			
	6	AREA CLASSIFICATION	IP-65			
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6			
	8	CERTIFICATES				
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG			
	10	BODY SIZE	3/4" PL / Ø? TC			
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L			
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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			
HANDLE	19	TYPE	-			
	20	COLOR	-			
	21	LOCKING YES / NO	-			
	22	EXTENDED	-			
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-			
	31	ENCLOSURE	MANUFACTURER STANDARD			
	32	SOLENOID VALVE	-			
ACCESSORIES	33	ELETTRICAL CONNECTION	-			
	34	VOLTAGE	-			
	35	INDICATION	-			
	36	LIMIT SWITCH OPEN	-			
	37	LIMIT SWITCH CLOSED	-			
	38	MOUNTING KIT	-			
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120
	PROJECT FLOW					-
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C
	DENSITY @ OPERATING CONDITION				kg/m³	
	VISCOSITY @ OPERATING CONDITION				Cp	
	FLUID CONDUCTIVITY				µS/cm²	
	INCROSTATION				-	-
	SUSPENDED SOLIDS (%)				-	-
	MAXIMUM LOSS OF LOAD ALLOWED				-	-
	MANUFACTURER	GEMU OR SIMILAR				
	MODEL					



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AUTOMATED DIAPHRAGM VALVE

SHEET:
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REV.:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370234					
	2	SERVICE	TO mAb CHROM. SKID N°1, CRM-3401					
	3	P&ID	7B-Z-0-2-39					
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370236-SS10-PP	3/4"-BUF-370230-SS10-CC			
	5	VALVE TYPE	DIAPHRAGM					
	6	AREA CLASSIFICATION	NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION	IP-65					
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / 3/4" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID		
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW					-		
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g	°C			
	DENSITY @ OPERATING CONDITION					- kg/m³		
	VISCOSITY @ OPERATING CONDITION					- Cp		
	FLUID CONDUCTIVITY					- μS/cm²		
	INCROSTATION					-		
	SUSPENDED SOLIDS (%)					-		
	MAXIMUM LOSS OF LOAD ALLOWED					-		
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							



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AUTOMATED DIAPHRAGM VALVE

SHEET:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370232			
	2	SERVICE	TO mAb CHROM. SKID N°1, CRM-3401			
	3	P&ID	7B-Z-0-2-39			
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370236-SS10-PP	3/4"-BUF-370230-SS10-CC	DIAPHRAGM
	5	VALVE TYPE	NOT CLASSIFIED			
	6	AREA CLASSIFICATION	IP-65			
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6			
	8	CERTIFICATES				
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG			
	10	BODY SIZE	3/4" PL / 3/4" TC			
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L			
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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			
HANDLE	19	TYPE	-			
	20	COLOR	-			
	21	LOCKING YES / NO	-			
	22	EXTENDED	-			
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-			
	31	ENCLOSURE	MANUFACTURER STANDARD			
ACCESSORIES	32	SOLENOID VALVE	-			
	33	ELECTRICAL CONNECTION	-			
	34	VOLTAGE	-			
	35	INDICATION	-			
	36	LIMIT SWITCH OPEN	-			
	37	LIMIT SWITCH CLOSED	-			
	38	MOUNTING KIT	-			
SERVICE	FLUID	PHYSICAL STATUS	PRODUCT		LIQUID	
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120
	PROJECT FLOW			-	-	-
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C
	DENSITY @ OPERATING CONDITION				- kg/m³	
	VISCOSITY @ OPERATING CONDITION				- Cp	
	FLUID CONDUCTIVITY				- μS/cm²	
	INCROSTATION			-	-	-
	SUSPENDED SOLIDS (%)			-	-	-
	MAXIMUM LOSS OF LOAD ALLOWED			-	-	-
	MANUFACTURER		GEMU OR SIMILAR			
	MODEL					



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR:

PRD-AIC-DSH-043

TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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REV.:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370231 / 7B-XV-370233B / 7B-XV-37023B					
	2	SERVICE	BUFFER FROM LARGE BUFFER PREP, TP-3702-3					
	3	P&ID	7B-Z-0-2-39					
	4	MAIN LINE	SERVICE LINE	1"-BUF-370211-SS10-PP	1"-CIP3R-770322-SS10-PP			
	5	VALVE TYPE	DIAPHRAGM					
	6	AREA CLASSIFICATION	NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION	IP-65					
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	1" TC / 1" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-TC / S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
		FLUID	PHYSICAL STATUS	PRODUCT		LIQUID		
		MINIMUM FLOW	NORMAL	MAXIMUM	-	-		
SERVICE		MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-		
		MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	1		
		PROJECT FLOW			-	120		
		DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g	°C		
		DENSITY @ OPERATING CONDITION			-	kg/m³		
		VISCOSITY @ OPERATING CONDITION			-	Cp		
		FLUID CONDUCTIVITY			-	µS/cm²		
		INCROSTATION			-	-		
		SUSPENDED SOLIDS (%)			-	-		
		MAXIMUM LOSS OF LOAD ALLOWED			-	-		
		MANUFACTURER			GEMU OR SIMILAR			
		MODEL						



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CLIENT NR:

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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370235 / 7B-XV-370234					
	2	SERVICE	TO mAb CHROM. SKID N°1, CRM-3401					
	3	P&ID	7B-Z-0-2-39					
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370236-SS10-PP	3/4"-BUF-370230-SS10-CC			
	5	VALVE TYPE	DIAPHRAGM					
	6	AREA CLASSIFICATION	NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION	IP-65					
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / Ø??" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
		FLUID	PHYSICAL STATUS	PRODUCT		LIQUID		
		MINIMUM FLOW	NORMAL	MAXIMUM	-	-		
SERVICE		MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-		
		MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	1		
		PROJECT FLOW			-	120		
		DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g	°C		
		DENSITY @ OPERATING CONDITION			-	kg/m³		
		VISCOSITY @ OPERATING CONDITION			-	Cp		
		FLUID CONDUCTIVITY			-	µS/cm²		
		INCROSTATION			-	-		
		SUSPENDED SOLIDS (%)			-	-		
		MAXIMUM LOSS OF LOAD ALLOWED			-	-		
		MANUFACTURER		GEMU OR SIMILAR				
		MODEL						



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CLIENT NR:

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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:	31 of 116
REV.:	2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370236					
	2	SERVICE	TO mAb CHROM. SKID N°1, CRM-3401					
	3	P&ID	7B-Z-0-2-39					
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370230-SS10-CC	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6					
	8	CERTIFICATES						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / Ø??" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS	PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW			-	-	-		
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C		
	DENSITY @ OPERATING CONDITION				- kg/m³			
	VISCOSITY @ OPERATING CONDITION				- Cp			
	FLUID CONDUCTIVITY				- μS/cm²			
	INCROSTATION			-	-	-		
	SUSPENDED SOLIDS (%)			-	-	-		
	MAXIMUM LOSS OF LOAD ALLOWED			-	-	-		
	MANUFACTURER		GEMU OR SIMILAR					
	MODEL							



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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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REV.:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370237					
	2	SERVICE	TO mAb CHROM. SKID N°1, CRM-3401					
	3	P&ID	7B-Z-0-2-39					
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370230-SS10-CC	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6					
	8	CERTIFICATES						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / Ø??" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID		
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW					-		
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C		
	DENSITY @ OPERATING CONDITION				kg/m³			
	VISCOSITY @ OPERATING CONDITION				Cp			
	FLUID CONDUCTIVITY				μS/cm²			
	INCROSTATION					-		
	SUSPENDED SOLIDS (%)					-		
	MAXIMUM LOSS OF LOAD ALLOWED					-		
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							



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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370238/7B-XV-370239					
	2	SERVICE	TO mAb CHROM. SKID N°1, CRM-3401					
	3	P&ID	7B-Z-0-2-39					
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370237-SS10-PP	3/4"-BUF-370231-SS10-CC			
	5	VALVE TYPE	DIAPHRAGM					
	6	AREA CLASSIFICATION	NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION	IP-65					
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / 3/4" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
		FLUID	PHYSICAL STATUS	PRODUCT		LIQUID		
		MINIMUM FLOW	NORMAL	MAXIMUM	-	-		
SERVICE		MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-		
		MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	1		
		PROJECT FLOW			-	120		
		DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g	°C		
		DENSITY @ OPERATING CONDITION			-	kg/m³		
		VISCOSITY @ OPERATING CONDITION			-	Cp		
		FLUID CONDUCTIVITY			-	µS/cm²		
		INCROSTATION			-	-		
		SUSPENDED SOLIDS (%)			-	-		
		MAXIMUM LOSS OF LOAD ALLOWED			-	-		
		MANUFACTURER			GEMU OR SIMILAR			
		MODEL						



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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370240					
	2	SERVICE	TO mAb CHROM. SKID N°1, CRM-3401					
	3	P&ID	7B-Z-0-2-37					
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370237-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6					
	8	CERTIFICATES						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / Ø??" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID		
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW					-		
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g	°C			
	DENSITY @ OPERATING CONDITION					- kg/m³		
	VISCOSITY @ OPERATING CONDITION					- Cp		
	FLUID CONDUCTIVITY					- μS/cm²		
	INCROSTATION					-		
	SUSPENDED SOLIDS (%)					-		
	MAXIMUM LOSS OF LOAD ALLOWED					-		
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							



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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370241					
	2	SERVICE	TO mAb CHROM. SKID N°1, CRM-3401					
	3	P&ID	7B-Z-0-2-37					
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370237-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6					
	8	CERTIFICATES						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / Ø??" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID		
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW					-		
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C		
	DENSITY @ OPERATING CONDITION				kg/m³			
	VISCOSITY @ OPERATING CONDITION				Cp			
	FLUID CONDUCTIVITY				μS/cm²			
	INCROSTATION					-		
	SUSPENDED SOLIDS (%)					-		
	MAXIMUM LOSS OF LOAD ALLOWED					-		
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							



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AUTOMATED DIAPHRAGM VALVE

SHEET:
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2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370242 / 7B-XV-370243					
	2	SERVICE	TO mAb CHROM. SKID N°1, CRM-3401					
	3	P&ID	7B-Z-0-2-39					
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370233-SS10-PP	3/4"-BUF-370232-SS10-CC			
	5	VALVE TYPE	DIAPHRAGM					
	6	AREA CLASSIFICATION	NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION	IP-65					
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / 3/4" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
		FLUID	PHYSICAL STATUS	PRODUCT		LIQUID		
		MINIMUM FLOW	NORMAL	MAXIMUM	-	-		
SERVICE		MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-		
		MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	1		
		PROJECT FLOW			-	120		
		DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g	°C		
		DENSITY @ OPERATING CONDITION			-	kg/m³		
		VISCOSITY @ OPERATING CONDITION			-	Cp		
		FLUID CONDUCTIVITY			-	µS/cm²		
		INCROSTATION			-	-		
		SUSPENDED SOLIDS (%)			-	-		
		MAXIMUM LOSS OF LOAD ALLOWED			-	-		
		MANUFACTURER			GEMU OR SIMILAR			
		MODEL						



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CLIENT NR:

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TITLE

AUTOMATED DIAPHRAGM VALVE

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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370244					
	2	SERVICE	TO mAb CHROM. SKID N°1, CRM-3401					
	3	P&ID	7B-Z-0-2-37					
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370232-SS10-CC	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6					
	8	CERTIFICATES						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / Ø??" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID		
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW					-		
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C		
	DENSITY @ OPERATING CONDITION				kg/m³			
	VISCOSITY @ OPERATING CONDITION				Cp			
	FLUID CONDUCTIVITY				μS/cm²			
	INCROSTATION					-		
	SUSPENDED SOLIDS (%)					-		
	MAXIMUM LOSS OF LOAD ALLOWED					-		
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							



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CLIENT NR:

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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370245					
	2	SERVICE	TO mAb CHROM. SKID N°1, CRM-3401					
	3	P&ID	7B-Z-0-2-37					
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370232-SS10-CC	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6					
	8	CERTIFICATES						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / Ø??" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID		
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW					-		
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C		
	DENSITY @ OPERATING CONDITION				kg/m³			
	VISCOSITY @ OPERATING CONDITION				Cp			
	FLUID CONDUCTIVITY				µS/cm²			
	INCROSTATION				-	-		
	SUSPENDED SOLIDS (%)				-	-		
	MAXIMUM LOSS OF LOAD ALLOWED				-	-		
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							



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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370246 / 7B-XV-370247					
	2	SERVICE	TO mAb CHROM. N°2					
	3	P&ID	7B-Z-0-2-39					
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370238-SS10-PP	3/4"-BUF-370234-SS10-CC			
	5	VALVE TYPE	DIAPHRAGM					
	6	AREA CLASSIFICATION	NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION	IP-65					
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / 3/4" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
		FLUID	PHYSICAL STATUS	PRODUCT		LIQUID		
		MINIMUM FLOW	NORMAL	MAXIMUM	-	-		
SERVICE		MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-		
		MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	1		
		PROJECT FLOW			-	120		
		DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g	°C		
		DENSITY @ OPERATING CONDITION			-	kg/m³		
		VISCOSITY @ OPERATING CONDITION			-	Cp		
		FLUID CONDUCTIVITY			-	µS/cm²		
		INCROSTATION			-	-		
		SUSPENDED SOLIDS (%)			-	-		
		MAXIMUM LOSS OF LOAD ALLOWED			-	-		
		MANUFACTURER			GEMU OR SIMILAR			
		MODEL						



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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370248					
	2	SERVICE	TO mAb CHROM. N°2					
	3	P&ID	7B-Z-0-2-37					
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370232-SS10-CC	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6					
	8	CERTIFICATES						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / Ø??" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELECTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
	FLUID		PHYSICAL STATUS		PRODUCT			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW		-					
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C			
	DENSITY @ OPERATING CONDITION		-					
	VISCOSITY @ OPERATING CONDITION		-					
	FLUID CONDUCTIVITY		-					
	INCROSTATION		-					
	SUSPENDED SOLIDS (%)		-					
	MAXIMUM LOSS OF LOAD ALLOWED		-					
	MANUFACTURER		GEMU OR SIMILAR					
	MODEL							



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AUTOMATED DIAPHRAGM VALVE

SHEET:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370249					
	2	SERVICE	TO mAb CHROM. N°2					
	3	P&ID	7B-Z-0-2-37					
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370234-SS10-CC	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6					
	8	CERTIFICATES						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / Ø??" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
	FLUID		PHYSICAL STATUS		PRODUCT			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW		-					
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C			
	DENSITY @ OPERATING CONDITION		-					
	VISCOSITY @ OPERATING CONDITION		-					
	FLUID CONDUCTIVITY		-					
	INCROSTATION		-					
	SUSPENDED SOLIDS (%)		-					
	MAXIMUM LOSS OF LOAD ALLOWED		-					
	MANUFACTURER		GEMU OR SIMILAR					
	MODEL							



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AUTOMATED DIAPHRAGM VALVE

SHEET:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370251 / 7B-XV-370252			
	2	SERVICE	BUFFER TO CEX			
	3	P&ID	7B-Z-0-2-39			
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370235-SS10-PP	3/4"-BUF-370235-SS10-CC	
	5	VALVE TYPE	DIAPHRAGM			
	6	AREA CLASSIFICATION	NOT CLASSIFIED			
	7	ENCLOSURE CLASSIFICATION	IP-65			
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6			
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG			
	10	BODY SIZE	3/4" PL / 3/4" TC			
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L			
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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			
HANDLE	19	TYPE	-			
	20	COLOR	-			
	21	LOCKING YES / NO	-			
	22	EXTENDED	-			
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-			
	31	ENCLOSURE	MANUFACTURER STANDARD			
	32	SOLENOID VALVE	-			
ACCESSORIES	33	ELETTRICAL CONNECTION	-			
	34	VOLTAGE	-			
	35	INDICATION	-			
	36	LIMIT SWITCH OPEN	-			
	37	LIMIT SWITCH CLOSED	-			
	38	MOUNTING KIT	-			
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120
	PROJECT FLOW					-
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g		°C
	DENSITY @ OPERATING CONDITION				- kg/m³	
	VISCOSITY @ OPERATING CONDITION				- Cp	
	FLUID CONDUCTIVITY				- μS/cm²	
	INCROSTATION			-		-
	SUSPENDED SOLIDS (%)			-		-
	MAXIMUM LOSS OF LOAD ALLOWED			-		-
	MANUFACTURER	GEMU OR SIMILAR				
	MODEL					



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CLIENT NR:

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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370253					
	2	SERVICE	BUFFER TO CEX					
	3	P&ID	7B-Z-0-2-39					
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370235-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6					
	8	CERTIFICATES						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / Ø??" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID		
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW					-		
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C		
	DENSITY @ OPERATING CONDITION				kg/m³			
	VISCOSITY @ OPERATING CONDITION				Cp			
	FLUID CONDUCTIVITY				μS/cm²			
	INCROSTATION					-		
	SUSPENDED SOLIDS (%)					-		
	MAXIMUM LOSS OF LOAD ALLOWED					-		
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							

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CLIENT NR:

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AUTOMATED DIAPHRAGM VALVE

 SHEET:
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2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-330011A / 7B-XV-330011B					
	2	SERVICE	FROM LOAD FILTER PRODUCT SUPPLY					
	3	P&ID	7B-Z-0-2-27					
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-330013-SS10-PP		-		
	5	VALVE TYPE	DIAPHRAGM					
	6	AREA CLASSIFICATION	NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION	IP-65					
	8	CERTIFICATES	-					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" TC / 3/4" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-TC/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT	LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW			-				
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g	°C			
	DENSITY @ OPERATING CONDITION			-	kg/m³			
	VISCOSITY @ OPERATING CONDITION			-	Cp			
	FLUID CONDUCTIVITY			-	μS/cm²			
	INCROSTATION			-	-			
	SUSPENDED SOLIDS (%)			-	-			
	MAXIMUM LOSS OF LOAD ALLOWED			-	-			
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							

NUMBER: 569-DB7B-AIC-731-004

CLIENT NR:

PRD-AIC-DSH-043

TITLE

AUTOMATED DIAPHRAGM VALVE

 SHEET:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-330012A / 7B-XV-330012B					
	2	SERVICE	FROM LOAD FILTER PRODUCT SUPPLY					
	3	P&ID	7B-Z-0-2-28					
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-330014-SS10-PP		-		
	5	VALVE TYPE	DIAPHRAGM					
	6	AREA CLASSIFICATION	NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION	IP-65					
	8	CERTIFICATES	-					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" TC / 3/4" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-TC/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT	LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW			-				
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g	°C			
	DENSITY @ OPERATING CONDITION			-	kg/m³			
	VISCOSITY @ OPERATING CONDITION			-	Cp			
	FLUID CONDUCTIVITY			-	μS/cm²			
	INCROSTATION			-	-			
	SUSPENDED SOLIDS (%)			-	-			
	MAXIMUM LOSS OF LOAD ALLOWED			-	-			
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							

NUMBER: 569-DB7B-AIC-731-004

CLIENT NR:

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TITLE

AUTOMATED DIAPHRAGM VALVE

 SHEET:
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2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370246					
	2	SERVICE	CHROMATOGRAPHY N°2 TO mAb					
	3	P&ID	7B-Z-0-2-39					
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370234-SS10-CC	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	-					
	8	CERTIFICATES	-					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / 3/4" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT	LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW			-				
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g	°C			
	DENSITY @ OPERATING CONDITION			-	kg/m³			
	VISCOSITY @ OPERATING CONDITION			-	Cp			
	FLUID CONDUCTIVITY			-	μS/cm²			
	INCROSTATION			-				
	SUSPENDED SOLIDS (%)			-				
	MAXIMUM LOSS OF LOAD ALLOWED			-				
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							

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CLIENT NR:

PRD-AIC-DSH-043

TITLE

AUTOMATED DIAPHRAGM VALVE

 SHEET:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370134					
	2	SERVICE	CHROMATOGRAPHY N°2 TO mAb					
	3	P&ID	7B-Z-0-2-37					
	4	MAIN LINE	SERVICE LINE	3/4"-BUF-370234-SS10-CC	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	-					
	8	CERTIFICATES	-					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / 3/4" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
		FLUID	PHYSICAL STATUS	PRODUCT		LIQUID		
SERVICE	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW			-	-	-		
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g		°C		
	DENSITY @ OPERATING CONDITION				-kg/m³			
	VISCOSITY @ OPERATING CONDITION				-Cp			
	FLUID CONDUCTIVITY				-μS/cm²			
	INCROSTATION			-	-	-		
	SUSPENDED SOLIDS (%)			-	-	-		
	MAXIMUM LOSS OF LOAD ALLOWED			-	-	-		
	MANUFACTURER			GEMU OR SIMILAR				
	MODEL							

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AUTOMATED DIAPHRAGM VALVE

 SHEET:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-370238					
	2	SERVICE	CHROMATOGRAPHY N°2 TO mAb					
	3	P&ID	7B-Z-0-2-37					
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370237-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	-					
	8	CERTIFICATES	-					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	3/4" PL / 3/4" TC					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT	LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW			-				
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g	°C			
	DENSITY @ OPERATING CONDITION			-	kg/m³			
	VISCOSITY @ OPERATING CONDITION			-	Cp			
	FLUID CONDUCTIVITY			-	μS/cm²			
	INCROSTATION			-				
	SUSPENDED SOLIDS (%)			-				
	MAXIMUM LOSS OF LOAD ALLOWED			-				
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							

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CLIENT NR:

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TITLE

AUTOMATED DIAPHRAGM VALVE

 SHEET:
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 REV.:
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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770318 / 7B-XV-770319					
	2	SERVICE	CIP SYSTEM N°3					
	3	P&ID	7B-Z-0-2-50					
	4	MAIN LINE	SERVICE LINE	2"-CIP3S-770301-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED					
	6	AREA CLASSIFICATION	IP-65					
	7	ENCLOSURE CLASSIFICATION	-					
	8	CERTIFICATES	-					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	2" PL / 2" PL					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL					
	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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELETTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
	FLUID	PHYSICAL STATUS		PRODUCT	LIQUID			
SERVICE	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW			-				
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g	°C			
	DENSITY @ OPERATING CONDITION			-	kg/m³			
	VISCOSITY @ OPERATING CONDITION			-	Cp			
	FLUID CONDUCTIVITY			-	μS/cm²			
	INCROSTATION			-				
	SUSPENDED SOLIDS (%)			-				
	MAXIMUM LOSS OF LOAD ALLOWED			-				
	MANUFACTURER	GEMU OR SIMILAR						
	MODEL							

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AUTOMATED DIAPHRAGM VALVE

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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-430001			
	2	SERVICE	AIR SUPPLY COMP. (INSTRUMENT)			
	3	P&ID	7B-Z-0-2-52			
	4	MAIN LINE	SERVICE LINE	3/4"-SFIC-370237-SS10-PP	-	-
	5	VALVE TYPE	GATE			
	6	AREA CLASSIFICATION	NOT CLASSIFIED			
	7	ENCLOSURE CLASSIFICATION	IP-65			
	8	CERTIFICATES	-			
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG			
	10	BODY SIZE	3/4" PL / 3/4" PL			
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L			
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL			
	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			
HANDLE	19	TYPE	-			
	20	COLOR	-			
	21	LOCKING YES / NO	-			
	22	EXTENDED	-			
ACTUATOR	23	TYPE 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	-			
	28	BODY COLOR	MANUFACTURER STANDARD			
	29	HOUSING MATERIAL	MANUFACTURER STANDARD			
	30	ELECTRICAL CLASS	-			
	31	ENCLOSURE	MANUFACTURER STANDARD			
	32	SOLENOID VALVE	-			
ACCESSORIES	33	ELECTRICAL CONNECTION	-			
	34	VOLTAGE	-			
	35	INDICATION	-			
	36	LIMIT SWITCH OPEN	-			
	37	LIMIT SWITCH CLOSED	-			
	38	MOUNTING KIT	-			
		FLUID	PHYSICAL STATUS		AIR	GAS
SERVICE	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-
	PROJECT FLOW			-	-	-
	DESIGN PRESSURE	DESIGN TEMPERATURE		6 bar-g	30 °C	
	DENSITY @ OPERATING CONDITION				- kg/m³	
	VISCOSITY @ OPERATING CONDITION				- Cp	
	FLUID CONDUCTIVITY				- μS/cm²	
	INCROSTATION			-	-	
	SUSPENDED SOLIDS (%)			-	-	
	MAXIMUM LOSS OF LOAD ALLOWED			-	-	
	MANUFACTURER	GEMU OR SIMILAR				
	MODEL					

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AUTOMATED DIAPHRAGM VALVE

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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-430002					
	2	SERVICE	CAUSTIC SUPPLY					
	3	P&ID	7B-Z-0-2-52					
	4	MAIN LINE	SERVICE LINE	1/2"-FH-430001	1/2"-FH-430004			
	5	VALVE TYPE	GATE					
	6	AREA CLASSIFICATION	NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION	IP-65					
	8	CERTIFICATES	-					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	1/2" PL / 1/2" PL					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL					
	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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	-					
	28	BODY COLOR	MANUFACTURER STANDARD					
	29	HOUSING MATERIAL	MANUFACTURER STANDARD					
	30	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELECTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
		FLUID	PHYSICAL STATUS	CAUSTIC SUPPLY		LIQUID		
SERVICE	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-		
	PROJECT FLOW			-				
	DESIGN PRESSURE	DESIGN TEMPERATURE		6	bar-g	30 °C		
	DENSITY @ OPERATING CONDITION			kg/m³				
	VISCOSITY @ OPERATING CONDITION			- Cp				
	FLUID CONDUCTIVITY			- μS/cm²				
	INCROSTATION			-				
	SUSPENDED SOLIDS (%)			-				
	MAXIMUM LOSS OF LOAD ALLOWED			-				
	MANUFACTURER			GEMU OR SIMILAR				
	MODEL							

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CLIENT NR:

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AUTOMATED DIAPHRAGM VALVE

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GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-430003						
	2	SERVICE	CAUSTIC SUPPLY						
	3	P&ID	7B-Z-0-2-52						
	4	MAIN LINE	SERVICE LINE	1/2"-FH-430001	1/2"-FH-430005				
	5	VALVE TYPE	GATE						
	6	AREA CLASSIFICATION	NOT CLASSIFIED						
	7	ENCLOSURE CLASSIFICATION	IP-65						
	8	CERTIFICATES	-						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1/2" PL / 1/2" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	23	TYPE 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	-						
	28	BODY COLOR	MANUFACTURER STANDARD						
	29	HOUSING MATERIAL	MANUFACTURER STANDARD						
	30	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELECTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
	FLUID	PHYSICAL STATUS		CAUSTIC SUPPLY	LIQUID				
SERVICE	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-			
	PROJECT FLOW			-					
	DESIGN PRESSURE	DESIGN TEMPERATURE	6 bar-g		30 °C				
	DENSITY @ OPERATING CONDITION			- kg/m³					
	VISCOSITY @ OPERATING CONDITION			- Cp					
	FLUID CONDUCTIVITY			- µS/cm²					
	INCROSTATION			-					
	SUSPENDED SOLIDS (%)			-					
	MAXIMUM LOSS OF LOAD ALLOWED			-					
	MANUFACTURER	GEMU OR SIMILAR							
	MODEL								



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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
53 of 116REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-371001						
	2	SERVICE	DILUTION (DO2) BUFFER						
	3	P&ID	7B-Z-0-2-40						
	4	MAIN LINE Ø	SERVICE LINE Nº		1"-PR-371001-SS10-PP	1"-CIP2R/SFIC-371001-SS10-PP			
	5	VALVE TYPE	DIAPHRAGM						
	6	AREA CLASSIFICATION	NOT CLASSIFIED						
	7	ENCLOSURE CLASSIFICATION	IP-65						
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1" TC / 1" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-TC/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS			PRODUCT	LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120			
	PROJECT FLOW			-					
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g	°C				
	DENSITY @ OPERATING CONDITION			- kg/m³					
	VISCOSITY @ OPERATING CONDITION			- Cp					
	FLUID CONDUCTIVITY			- μS/cm²					
	INCROSTATION			-					
	SUSPENDED SOLIDS (%)			-					
	MAXIMUM LOSS OF LOAD ALLOWED			-					
	MANUFACTURER			GEMU OR SIMILAR					
	MODEL								



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AUTOMATED DIAPHRAGM VALVESHEET:
54 of 116REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-371003							
	2	SERVICE	DILUTION (DO2) BUFFER							
	3	P&ID	7B-Z-0-2-40							
	4	MAIN LINE Ø	SERVICE LINE Nº	1"-PR-371001-SS10-PP	1"-CIP2R-371102-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM							
	6	AREA CLASSIFICATION	NOT CLASSIFIED							
	7	ENCLOSURE CLASSIFICATION	IP-65							
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	1" PL / 1" PL							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL							
	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							
HANDLE	19	TYPE	-							
	20	COLOR	-							
	21	LOCKING YES / NO	-							
	22	EXTENDED	-							
ACTUATOR	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	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
ACCESSORIES	33	ELETTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	-							
	37	LIMIT SWITCH CLOSED	-							
	38	MOUNTING KIT	-							
SERVICE	FLUID	PHYSICAL STATUS			PRODUCT	LIQUID				
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	120			
	PROJECT FLOW				-					
	DESIGN PRESSURE	DESIGN TEMPERATURE				- bar-g	- °C			
	DENSITY @ OPERATING CONDITION									
	VISCOSITY @ OPERATING CONDITION									
	FLUID CONDUCTIVITY									
	INCROSTATION									
	SUSPENDED SOLIDS (%)									
	MAXIMUM LOSS OF LOAD ALLOWED									
	MANUFACTURER				GEMU OR SIMILAR					
	MODEL									



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TITLE

AUTOMATED DIAPHRAGM VALVESHEET:
55 of 116REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-371101					
	2	SERVICE	DILUTION (DO2) BUFFER					
	3	P&ID	7B-Z-0-2-40					
	4	MAIN LINE Ø	SERVICE LINE Nº	1"-PR-371101-SS10-PP	-			
	5	VALVE TYPE	DIAPHRAGM					
	6	AREA CLASSIFICATION	NOT CLASSIFIED					
	7	ENCLOSURE CLASSIFICATION	IP-65					
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6					
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG					
	10	BODY SIZE	1" TC / ?" PL					
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L					
	12	END CONNECTION, AND TYPE.	S1/H-TC/ S2/H-PL					
	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					
HANDLE	19	TYPE	-					
	20	COLOR	-					
	21	LOCKING YES / NO	-					
	22	EXTENDED	-					
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-					
	31	ENCLOSURE	MANUFACTURER STANDARD					
	32	SOLENOID VALVE	-					
ACCESSORIES	33	ELECTRICAL CONNECTION	-					
	34	VOLTAGE	-					
	35	INDICATION	-					
	36	LIMIT SWITCH OPEN	-					
	37	LIMIT SWITCH CLOSED	-					
	38	MOUNTING KIT	-					
SERVICE	FLUID	PHYSICAL STATUS	PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	120		
	PROJECT FLOW		-		-			
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C			
	DENSITY @ OPERATING CONDITION		kg/m³					
	VISCOSITY @ OPERATING CONDITION		Cp					
	FLUID CONDUCTIVITY		μS/cm²					
	INCROSTATION							
	SUSPENDED SOLIDS (%)							
	MAXIMUM LOSS OF LOAD ALLOWED							
	MANUFACTURER		GEMU OR SIMILAR					
	MODEL							



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AUTOMATED DIAPHRAGM VALVESHEET:
56 of 116REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-371103								
	2	SERVICE	DILUTION (DO2) BUFFER								
	3	P&ID	7B-Z-0-2-40								
	4	MAIN LINE Ø	SERVICE LINE Nº	1"-CIP2R-371102-SS10-PP							
	5	VALVE TYPE	DIAPHRAGM								
	6	AREA CLASSIFICATION	NOT CLASSIFIED								
	7	ENCLOSURE CLASSIFICATION	IP-65								
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6								
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	1" PL / 1" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID					
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-				
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1				
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80				
	PROJECT FLOW										
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C						
	DENSITY @ OPERATING CONDITION			- kg/m³							
	VISCOSITY @ OPERATING CONDITION			- Cp							
	FLUID CONDUCTIVITY			- μS/cm²							
	INCROSTATION										
	SUSPENDED SOLIDS (%)										
	MAXIMUM LOSS OF LOAD ALLOWED										
	MANUFACTURER			GEMU OR SIMILAR							
	MODEL										



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AUTOMATED DIAPHRAGM VALVE

SHEET:
57 of 116REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-371103							
	2	SERVICE	DILUTION (DO2) BUFFER							
	3	P&ID	7B-Z-0-2-40							
	4	MAIN LINE Ø	SERVICE LINE Nº	1"-BUF-370212-SS10-PP	1"-CIP3R-770323-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM							
	6	AREA CLASSIFICATION	NOT CLASSIFIED							
	7	ENCLOSURE CLASSIFICATION	IP-65							
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	1" TC / 1" TC							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL							
	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							
HANDLE	19	TYPE	-							
	20	COLOR	-							
	21	LOCKING YES / NO	-							
	22	EXTENDED	-							
ACTUATOR	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	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
ACCESSORIES	33	ELETTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	-							
	37	LIMIT SWITCH CLOSED	-							
	38	MOUNTING KIT	-							
SERVICE	FLUID	PHYSICAL STATUS			PRODUCT	LIQUID				
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80			
	PROJECT FLOW	-								
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g			- °C				
	DENSITY @ OPERATING CONDITION	-				- kg/m³				
	VISCOSITY @ OPERATING CONDITION	-				- Cp				
	FLUID CONDUCTIVITY	-				- μS/cm²				
	INCROSTATION	-								
	SUSPENDED SOLIDS (%)	-								
	MAXIMUM LOSS OF LOAD ALLOWED	-								
	MANUFACTURER	GEMU OR SIMILAR								
	MODEL	-								



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AUTOMATED DIAPHRAGM VALVE

REV.:

2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-371213 / 7B-XV-371215A / 7B-XV-371215B							
	2	SERVICE	LARGE BUFFER PREP, TP-3702-3 BUFFER FROM							
	3	P&ID	7B-Z-0-2-40							
	4	MAIN LINE Ø	SERVICE LINE Nº	1"-BUF-370212-SS10-PP	1"-CIP3R-770323-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM							
	6	AREA CLASSIFICATION	NOT CLASSIFIED							
	7	ENCLOSURE CLASSIFICATION	IP-65							
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	1" PL / 1" PL							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL							
	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							
HANDLE	19	TYPE	-							
	20	COLOR	-							
	21	LOCKING YES / NO	-							
	22	EXTENDED	-							
ACTUATOR	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	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
ACCESSORIES	33	ELETTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	-							
	37	LIMIT SWITCH CLOSED	-							
	38	MOUNTING KIT	-							
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID				
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80			
	PROJECT FLOW									
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C					
	DENSITY @ OPERATING CONDITION			- kg/m³						
	VISCOSITY @ OPERATING CONDITION			- Cp						
	FLUID CONDUCTIVITY			- μS/cm²						
	INCROSTATION									
	SUSPENDED SOLIDS (%)									
	MAXIMUM LOSS OF LOAD ALLOWED									
	MANUFACTURER			GEMU OR SIMILAR						
	MODEL									



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SHEET:
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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770118/7B-XV-770119							
	2	SERVICE	CIP SYSTEM N°1							
	3	P&ID	7B-Z-0-2-44							
	4	MAIN LINE Ø	SERVICE LINE N°	1 1/2"-CIP1S-770101-SS10-PP	1 "-CIP1S-770101-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM							
	6	AREA CLASSIFICATION	NOT CLASSIFIED							
	7	ENCLOSURE CLASSIFICATION	IP-65							
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	1.1/2" PL / 1" / 1.1/2" PL							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL							
	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							
HANDLE	19	TYPE	-							
	20	COLOR	-							
	21	LOCKING YES / NO	-							
	22	EXTENDED	-							
ACTUATOR	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	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
ACCESSORIES	33	ELETTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	-							
	37	LIMIT SWITCH CLOSED	-							
	38	MOUNTING KIT	-							
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID				
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80			
	PROJECT FLOW									
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C					
	DENSITY @ OPERATING CONDITION			- kg/m³						
	VISCOSITY @ OPERATING CONDITION			- Cp						
	FLUID CONDUCTIVITY			- μS/cm²						
	INCROSTATION									
	SUSPENDED SOLIDS (%)									
	MAXIMUM LOSS OF LOAD ALLOWED									
	MANUFACTURER			GEMU OR SIMILAR						
	MODEL									



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

TITLE

SHEET:
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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770120 / 7B-XV-770121						
	2	SERVICE	CIP SYSTEM N°1						
	3	P&ID	7B-Z-0-2-44						
	4	MAIN LINE Ø	SERVICE LINE N°	1 1/2"-CIP1S-770101-SS10-PP	1"-CIP1S-770110-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED						
	6	AREA CLASSIFICATION	IP-65						
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6						
	8	CERTIFICATES							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1.12" PL / 1" / 1.12" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW		-		-				
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C				
	DENSITY @ OPERATING CONDITION		kg/m³						
	VISCOSITY @ OPERATING CONDITION		Cp						
	FLUID CONDUCTIVITY		μS/cm²						
	INCROSTATION								
	SUSPENDED SOLIDS (%)								
	MAXIMUM LOSS OF LOAD ALLOWED								
	MANUFACTURER		GEMU OR SIMILAR						
	MODEL								



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

TITLE

SHEET:
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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770122 / 7B-XV-770123						
	2	SERVICE	CIP SYS. N°1 CIP-7701, RETURN - MEDIA AND FERM. AREA						
	3	P&ID	7B-Z-0-2-44						
	4	MAIN LINE Ø	SERVICE LINE Nº	1 1/2"-CIP1S-770101-SS10-PP	1 1/2"-CIP1S-770108-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED						
	6	AREA CLASSIFICATION	IP-65						
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6						
	8	CERTIFICATES							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1.1/2" PL / 1.1/2" / 1.1/2" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW			-		-			
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C				
	DENSITY @ OPERATING CONDITION			- kg/m³					
	VISCOSITY @ OPERATING CONDITION			- Cp					
	FLUID CONDUCTIVITY			- μS/cm²					
	INCROSTATION								
	SUSPENDED SOLIDS (%)								
	MAXIMUM LOSS OF LOAD ALLOWED								
	MANUFACTURER			GEMU OR SIMILAR					
	MODEL								



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TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
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REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770124 / 7B-XV-770125								
	2	SERVICE	CIP SYSTEM N°1								
	3	P&ID	7B-Z-0-2-44								
	4	MAIN LINE Ø	SERVICE LINE N°	1 1/2"-CIP1S-770101-SS10-PP		1"-CIP1S-770116-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM								
	6	AREA CLASSIFICATION	NOT CLASSIFIED								
	7	ENCLOSURE CLASSIFICATION	IP-65								
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6								
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	1.1/2" PL / 1" / 1.1/2" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID					
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-				
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1				
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80				
	PROJECT FLOW			-		-					
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C						
	DENSITY @ OPERATING CONDITION			kg/m³							
	VISCOSITY @ OPERATING CONDITION			Cp							
	FLUID CONDUCTIVITY			μS/cm²							
	INCROSTATION										
	SUSPENDED SOLIDS (%)										
	MAXIMUM LOSS OF LOAD ALLOWED										
	MANUFACTURER			GEMU OR SIMILAR							
	MODEL										



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770126 / 7B-XV-770127 / XV-770149								
	2	SERVICE	CIP SYSTEM N°1								
	3	P&ID	7B-Z-0-2-44								
	4	MAIN LINE Ø	SERVICE LINE Nº	1 1/2"-CIP1S-770101-SS10-PP		1 1/2"-CIP1S-770113-SS10-PP 1 1/2"-CIP1S-770115-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM								
	6	AREA CLASSIFICATION	NOT CLASSIFIED								
	7	ENCLOSURE CLASSIFICATION	IP-65								
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6								
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	1.1/2" PL / 1.1/2" / 1.1/2" / 1.1/2" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
SERVICE	FLUID	PHYSICAL STATUS			PRODUCT	LIQUID					
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-				
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1				
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80				
	PROJECT FLOW				-						
	DESIGN PRESSURE	DESIGN TEMPERATURE				- bar-g	- °C				
	DENSITY @ OPERATING CONDITION				-	kg/m³					
	VISCOSITY @ OPERATING CONDITION				-	Cp					
	FLUID CONDUCTIVITY				-	μS/cm²					
	INCROSTATION				-						
	SUSPENDED SOLIDS (%)				-						
	MAXIMUM LOSS OF LOAD ALLOWED				-						
	MANUFACTURER				GEMU OR SIMILAR						
	MODEL										



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770132 / 7B-XV-770132 / 7B-XV-770129							
	2	SERVICE	CIP SYSTEM N°1							
	3	P&ID	7B-Z-0-2-44							
	4	MAIN LINE Ø	SERVICE LINE Nº	1 1/2"-CIP1S-770101-SS10-PP	1"-CIP1S-770105-SS10-PP 1"-CIP1S-770103-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM							
	6	AREA CLASSIFICATION	NOT CLASSIFIED							
	7	ENCLOSURE CLASSIFICATION	IP-65							
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	1.1/2" PL / 1" / 1" / 1.1/2" PL							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL							
	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							
HANDLE	19	TYPE	-							
	20	COLOR	-							
	21	LOCKING YES / NO	-							
	22	EXTENDED	-							
ACTUATOR	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	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
ACCESSORIES	33	ELETTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	-							
	37	LIMIT SWITCH CLOSED	-							
	38	MOUNTING KIT	-							
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID				
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80			
	PROJECT FLOW									
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C					
	DENSITY @ OPERATING CONDITION			- kg/m³						
	VISCOSITY @ OPERATING CONDITION			- Cp						
	FLUID CONDUCTIVITY			- μS/cm²						
	INCROSTATION									
	SUSPENDED SOLIDS (%)									
	MAXIMUM LOSS OF LOAD ALLOWED									
	MANUFACTURER			GEMU OR SIMILAR						
	MODEL									



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770150 / 7B-XV-770151						
	2	SERVICE	CIP SYSTEM N°1						
	3	P&ID	7B-Z-0-2-44						
	4	MAIN LINE Ø	SERVICE LINE Nº	1 1/2"-CIP1S-770101-SS10-PP	1 1/2"-CIP1S-770111-SS10-PP				
	5	VALVE TYPE	DIAPHRAGM						
	6	AREA CLASSIFICATION	NOT CLASSIFIED						
	7	ENCLOSURE CLASSIFICATION	IP-65						
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1.1/2" PL / 1.1/2" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW								
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C				
	DENSITY @ OPERATING CONDITION			- kg/m³					
	VISCOSITY @ OPERATING CONDITION			- Cp					
	FLUID CONDUCTIVITY			- μS/cm²					
	INCROSTATION								
	SUSPENDED SOLIDS (%)								
	MAXIMUM LOSS OF LOAD ALLOWED								
	MANUFACTURER			GEMU OR SIMILAR					
	MODEL								



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770134 / 7B-XV-770133							
	2	SERVICE	CIP SYSTEM N°1							
	3	P&ID	7B-Z-0-2-45							
	4	MAIN LINE Ø	SERVICE LINE N°	2"-CIP1R-770143-SS10-PP	1"-CIP1R-770130-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM							
	6	AREA CLASSIFICATION	NOT CLASSIFIED							
	7	ENCLOSURE CLASSIFICATION	IP-65							
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	2" PL / 1" PL / 2" PL							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL							
	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							
HANDLE	19	TYPE	-							
	20	COLOR	-							
	21	LOCKING YES / NO	-							
	22	EXTENDED	-							
ACTUATOR	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	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
ACCESSORIES	33	ELETTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	-							
	37	LIMIT SWITCH CLOSED	-							
	38	MOUNTING KIT	-							
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID				
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80			
	PROJECT FLOW									
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C					
	DENSITY @ OPERATING CONDITION			- kg/m³						
	VISCOSITY @ OPERATING CONDITION			- Cp						
	FLUID CONDUCTIVITY			- μS/cm²						
	INCROSTATION									
	SUSPENDED SOLIDS (%)									
	MAXIMUM LOSS OF LOAD ALLOWED									
	MANUFACTURER			GEMU OR SIMILAR						
	MODEL									



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AUTOMATED DIAPHRAGM VALVE

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2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770135 / 7B-XV-770136						
	2	SERVICE	CIP SYSTEM N°1						
	3	P&ID	7B-Z-0-2-45						
	4	MAIN LINE Ø	SERVICE LINE N°	2"-CIP1R-770143-SS10-PP	1"-CIP1R-770140-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED						
	6	AREA CLASSIFICATION	IP-65						
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6						
	8	CERTIFICATES							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	2" PL / 1" PL / 2" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW		-		-				
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C				
	DENSITY @ OPERATING CONDITION		kg/m³						
	VISCOSITY @ OPERATING CONDITION		Cp						
	FLUID CONDUCTIVITY		μS/cm²						
	INCROSTATION								
	SUSPENDED SOLIDS (%)								
	MAXIMUM LOSS OF LOAD ALLOWED								
	MANUFACTURER		GEMU OR SIMILAR						
	MODEL								



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770140 / 7B-XV-770141 / XV-770139						
	2	SERVICE	CIP SYSTEM N°1						
	3	P&ID	7B-Z-0-2-45						
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP1R-770143-SS10-PP	2"-CIP1R-770132-SS10-PP 1 1/2"-CIP1R-770131-SS10-PP				
	5	VALVE TYPE	DIAPHRAGM						
	6	AREA CLASSIFICATION	NOT CLASSIFIED						
	7	ENCLOSURE CLASSIFICATION	IP-65						
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	2" PL / 1" / 1.1/2" 2" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS			PRODUCT	LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW				-				
	DESIGN PRESSURE	DESIGN TEMPERATURE				- bar-g	- °C		
	DENSITY @ OPERATING CONDITION								
	VISCOSITY @ OPERATING CONDITION								
	FLUID CONDUCTIVITY								
	INCROSTATION								
	SUSPENDED SOLIDS (%)								
	MAXIMUM LOSS OF LOAD ALLOWED								
	MANUFACTURER				GEMU OR SIMILAR				
	MODEL								



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

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AUTOMATED DIAPHRAGM VALVE

REV.:

2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770146 / 7B-XV-770142 / 7B-XV-770143 / 7B-XV-800001							
	2	SERVICE	CIP SYSTEM N°1							
	3	P&ID	7B-Z-0-2-45							
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP1R-770143-SS10-PP	2"-CIP1S-770143-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM							
	6	AREA CLASSIFICATION	NOT CLASSIFIED							
	7	ENCLOSURE CLASSIFICATION	IP-65							
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	2" PL / 1" / 2" / 2" PL							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL							
	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							
HANDLE	19	TYPE	-							
	20	COLOR	-							
	21	LOCKING YES / NO	-							
	22	EXTENDED	-							
ACTUATOR	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	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
ACCESSORIES	33	ELETTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	-							
	37	LIMIT SWITCH CLOSED	-							
	38	MOUNTING KIT	-							
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID				
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80			
	PROJECT FLOW									
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C					
	DENSITY @ OPERATING CONDITION			- kg/m³						
	VISCOSITY @ OPERATING CONDITION			- Cp						
	FLUID CONDUCTIVITY			- μS/cm²						
	INCROSTATION									
	SUSPENDED SOLIDS (%)									
	MAXIMUM LOSS OF LOAD ALLOWED									
	MANUFACTURER			GEMU OR SIMILAR						
	MODEL									



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AUTOMATED DIAPHRAGM VALVE

REV.:

2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770148 / 7B-XV-770147						
	2	SERVICE	CIP SYSTEM N°1						
	3	P&ID	7B-Z-0-2-45						
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP1R-770143-SS10-PP	2"-CIP1S-770142-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED						
	6	AREA CLASSIFICATION	IP-65						
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6						
	8	CERTIFICATES							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	2" PL / 2" / 2" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS			PRODUCT	LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW				-				
	DESIGN PRESSURE	DESIGN TEMPERATURE				- bar-g	- °C		
	DENSITY @ OPERATING CONDITION				-	kg/m³			
	VISCOSITY @ OPERATING CONDITION				-	Cp			
	FLUID CONDUCTIVITY				-	μS/cm²			
	INCROSTATION				-				
	SUSPENDED SOLIDS (%)				-				
	MAXIMUM LOSS OF LOAD ALLOWED				-				
	MANUFACTURER				GEMU OR SIMILAR				
	MODEL								



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770144 / 7B-XV-770145 / 7B-XV-770148						
	2	SERVICE	CIP SYSTEM N°1						
	3	P&ID	7B-Z-0-2-45						
	4	MAIN LINE Ø	SERVICE LINE N°		2"-CIP1S-770143-SS10-PP	1"-CIP1R-770138-SS10-PP (FUTURE) 2"-CIP1R-770135-SS10-PP (FUTURE)			
	5	VALVE TYPE	DIAPHRAGM						
	6	AREA CLASSIFICATION	NOT CLASSIFIED						
	7	ENCLOSURE CLASSIFICATION	IP-65						
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	2" PL / 1"TC / 2"TC						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1PL / S2TC / S3TC						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW								
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g	- °C				
	DENSITY @ OPERATING CONDITION				- kg/m³				
	VISCOSITY @ OPERATING CONDITION				- Cp				
	FLUID CONDUCTIVITY				- μS/cm²				
	INCROSTATION								
	SUSPENDED SOLIDS (%)								
	MAXIMUM LOSS OF LOAD ALLOWED								
	MANUFACTURER				GEMU OR SIMILAR				
	MODEL								



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770136 / 7B-XV-770137 / 7B-XV-800002						
	2	SERVICE	CIP SYSTEM N°1						
	3	P&ID	7B-Z-0-2-45						
	4	MAIN LINE Ø	SERVICE LINE N°		2"-CIP1S-770143-SS10-PP	2"-WW2-800006-SS5-AS			
	5	VALVE TYPE	DIAPHRAGM						
	6	AREA CLASSIFICATION	NOT CLASSIFIED						
	7	ENCLOSURE CLASSIFICATION	IP-65						
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	2" PL / 2"PL / 2" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1PL / S2PL / S3PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW								
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g		- °C			
	DENSITY @ OPERATING CONDITION					- kg/m³			
	VISCOSITY @ OPERATING CONDITION					- Cp			
	FLUID CONDUCTIVITY					- μS/cm²			
	INCROSTATION								
MANUFACTURER	SUSPENDED SOLIDS (%)								
	MAXIMUM LOSS OF LOAD ALLOWED								
	MANUFACTURER			GEMU OR SIMILAR					
	MODEL								



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770221 / 7B-XV-770220						
	2	SERVICE	CIP SYS. N°2						
	3	P&ID	7B-Z-0-2-47						
	4	MAIN LINE Ø	SERVICE LINE Nº	1 1/2"-CIP2S-770201-SS10-PP	1 1/2"-CIP2S-770206-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED						
	6	AREA CLASSIFICATION	IP-65						
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6						
	8	CERTIFICATES							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1.1/2" PL / 1.1/2" / 1.1/2" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW			-		-			
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C				
	DENSITY @ OPERATING CONDITION			kg/m³					
	VISCOSITY @ OPERATING CONDITION			Cp					
	FLUID CONDUCTIVITY			μS/cm²					
	INCROSTATION								
	SUSPENDED SOLIDS (%)								
	MAXIMUM LOSS OF LOAD ALLOWED								
	MANUFACTURER			GEMU OR SIMILAR					
	MODEL								



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AUTOMATED DIAPHRAGM VALVE

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REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770223 / 7B-XV-770222						
	2	SERVICE	CIP SYS. N°2						
	3	P&ID	7B-Z-0-2-47						
	4	MAIN LINE Ø	SERVICE LINE N°	1 1/2"-CIP2S-770201-SS10-PP	1 1/2"-CIP2S-770201-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED						
	6	AREA CLASSIFICATION	IP-65						
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6						
	8	CERTIFICATES							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1.1/2" PL / 1.1/2" / 1.1/2" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW		-		-				
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C				
	DENSITY @ OPERATING CONDITION		kg/m³						
	VISCOSITY @ OPERATING CONDITION		Cp						
	FLUID CONDUCTIVITY		μS/cm²						
	INCROSTATION								
	SUSPENDED SOLIDS (%)								
	MAXIMUM LOSS OF LOAD ALLOWED								
	MANUFACTURER		GEMU OR SIMILAR						
	MODEL								



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770227 / 7B-XV-770226							
	2	SERVICE	CIP SYS. N°2		7B-Z-0-2-47					
	3	P&ID								
	4	MAIN LINE Ø	SERVICE LINE N°	1 1/2"-CIP2S-770201-SS10-PP	1"-CIP2S-770207-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM							
	6	AREA CLASSIFICATION	NOT CLASSIFIED							
	7	ENCLOSURE CLASSIFICATION	IP-65							
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	1.1/2" PL /1" /1.1/2" PL							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL							
	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							
HANDLE	19	TYPE	-							
	20	COLOR	-							
	21	LOCKING YES / NO	-							
	22	EXTENDED	-							
ACTUATOR	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	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
ACCESSORIES	33	ELETTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	-							
	37	LIMIT SWITCH CLOSED	-							
	38	MOUNTING KIT	-							
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID				
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80			
	PROJECT FLOW									
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C					
	DENSITY @ OPERATING CONDITION			- kg/m³						
	VISCOSITY @ OPERATING CONDITION			- Cp						
	FLUID CONDUCTIVITY			- μS/cm²						
	INCROSTATION									
	SUSPENDED SOLIDS (%)									
	MAXIMUM LOSS OF LOAD ALLOWED									
	MANUFACTURER			GEMU OR SIMILAR						
	MODEL									



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

TITLE

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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770217 / 7B-XV-770216						
	2	SERVICE	CIP SYS. N°2						
	3	P&ID	7B-Z-0-2-47						
	4	MAIN LINE Ø	SERVICE LINE N°	1 1/2"-CIP2S-770201-SS10-PP	1 1/2"-CIP2S-770203-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED						
	6	AREA CLASSIFICATION	IP-65						
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6						
	8	CERTIFICATES							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1.1/2" PL / 1.1/2" / 1.1/2" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW		-		-				
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C				
	DENSITY @ OPERATING CONDITION		kg/m³						
	VISCOSITY @ OPERATING CONDITION		Cp						
	FLUID CONDUCTIVITY		μS/cm²						
	INCROSTATION								
	SUSPENDED SOLIDS (%)								
	MAXIMUM LOSS OF LOAD ALLOWED								
	MANUFACTURER		GEMU OR SIMILAR						
	MODEL								

NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

TITLE

SHEET:
77 of 116**AUTOMATED DIAPHRAGM VALVE**REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770231 / 7B-XV-770232 / 7B-XV-770233				
	2	SERVICE	CIP SYSTEM N°2				
	3	P&ID	7B-Z-0-2-48				
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP2R-770224-SS10-PP	1 1/2"-CIP2S-770203-SS10-PP	1 1/2"-CIP2S-770203-SS10-PP	
	5	VALVE TYPE	DIAPHRAGM				
	6	AREA CLASSIFICATION	NOT CLASSIFIED				
	7	ENCLOSURE CLASSIFICATION	IP-65				
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6				
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG				
	10	BODY SIZE	2" PL /1.1/2" /1.1/2" /2" PL				
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L				
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL				
	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				
HANDLE	19	TYPE	-				
	20	COLOR	-				
	21	LOCKING YES / NO	-				
	22	EXTENDED	-				
ACTUATOR	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	ELECTRICAL CLASS	-				
	31	ENCLOSURE	MANUFACTURER STANDARD				
	32	SOLENOID VALVE	-				
ACCESSORIES	33	ELETTRICAL CONNECTION	-				
	34	VOLTAGE	-				
	35	INDICATION	-				
	36	LIMIT SWITCH OPEN	-				
	37	LIMIT SWITCH CLOSED	-				
	38	MOUNTING KIT	-				
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID	
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80
	PROJECT FLOW						
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C		
	DENSITY @ OPERATING CONDITION			- kg/m³			
	VISCOSITY @ OPERATING CONDITION			- Cp			
	FLUID CONDUCTIVITY			- μS/cm²			
	INCROSTATION			-		-	
	SUSPENDED SOLIDS (%)			-		-	
	MAXIMUM LOSS OF LOAD ALLOWED			-		-	
	MANUFACTURER			GEMU OR SIMILAR			
	MODEL						



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CLIENT NR: PRD-AIC-DSH-043

TITLE

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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770233 / 7B-XV-770234 / 7B-XV-800007				
	2	SERVICE	CIP SYSTEM N°2				
	3	P&ID	7B-Z-0-2-48				
	4	MAIN LINE Ø	SERVICE LINE Nº			2"-CIP2S-770223-SS10-PP	2"-CIP2R-770222-SS10-PP
	5	VALVE TYPE	DIAPHRAGM				
	6	AREA CLASSIFICATION	NOT CLASSIFIED				
	7	ENCLOSURE CLASSIFICATION	IP-65				
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6				
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG				
	10	BODY SIZE	2" PL / 2" / 2" / 2" PL				
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L				
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL				
	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				
HANDLE	19	TYPE	-				
	20	COLOR	-				
	21	LOCKING YES / NO	-				
	22	EXTENDED	-				
ACTUATOR	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	ELECTRICAL CLASS	-				
	31	ENCLOSURE	MANUFACTURER STANDARD				
	32	SOLENOID VALVE	-				
ACCESSORIES	33	ELETTRICAL CONNECTION	-				
	34	VOLTAGE	-				
	35	INDICATION	-				
	36	LIMIT SWITCH OPEN	-				
	37	LIMIT SWITCH CLOSED	-				
	38	MOUNTING KIT	-				
SERVICE	FLUID	PHYSICAL STATUS			PRODUCT		LIQUID
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80
	PROJECT FLOW						
	DESIGN PRESSURE	DESIGN TEMPERATURE			- bar-g	- °C	
	DENSITY @ OPERATING CONDITION				- kg/m³		
	VISCOSITY @ OPERATING CONDITION				- Cp		
	FLUID CONDUCTIVITY				- μS/cm²		
	INCROSTATION				-		
	SUSPENDED SOLIDS (%)				-		
	MAXIMUM LOSS OF LOAD ALLOWED				-		
	MANUFACTURER				GEMU OR SIMILAR		
	MODEL						



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CLIENT NR: PRD-AIC-DSH-043

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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770238 / 7B-XV-770236 / 7B-XV-770237 / 7B-XV-770228							
	2	SERVICE	CIP SYSTEM N°2							
	3	P&ID	7B-Z-0-2-48							
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP2R-770224-SS10-PP			2"-CIP2R-770224-SS10-PP			
	5	VALVE TYPE	DIAPHRAGM							
	6	AREA CLASSIFICATION	NOT CLASSIFIED							
	7	ENCLOSURE CLASSIFICATION	IP-65							
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	2" PL / 1" / 2 1/4" / 2" PL							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL							
	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							
HANDLE	19	TYPE	-							
	20	COLOR	-							
	21	LOCKING YES / NO	-							
	22	EXTENDED	-							
ACTUATOR	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	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
ACCESSORIES	33	ELETTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	-							
	37	LIMIT SWITCH CLOSED	-							
	38	MOUNTING KIT	-							
SERVICE	FLUID	PHYSICAL STATUS			PRODUCT	LIQUID				
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80			
	PROJECT FLOW									
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g		- °C				
	DENSITY @ OPERATING CONDITION				- kg/m³					
	VISCOSITY @ OPERATING CONDITION				- Cp					
	FLUID CONDUCTIVITY				- μS/cm²					
	INCROSTATION			-		-				
	SUSPENDED SOLIDS (%)			-		-				
	MAXIMUM LOSS OF LOAD ALLOWED			-		-				
	MANUFACTURER	GEMU OR SIMILAR								
	MODEL									



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TITLE

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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770239 / 7B-XV-770240 / 7B-XV-800006				
	2	SERVICE	CIP SYSTEM N°2				
	3	P&ID	7B-Z-0-2-48				
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP2R-770224-SS10-PP	2"-CIP2R-770216-SS10-PP		
	5	VALVE TYPE	DIAPHRAGM				
	6	AREA CLASSIFICATION	NOT CLASSIFIED				
	7	ENCLOSURE CLASSIFICATION	IP-65				
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6				
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG				
	10	BODY SIZE	2" PL / 2" / 2" PL				
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L				
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL				
	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				
HANDLE	19	TYPE	-				
	20	COLOR	-				
	21	LOCKING YES / NO	-				
	22	EXTENDED	-				
ACTUATOR	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	ELECTRICAL CLASS	-				
	31	ENCLOSURE	MANUFACTURER STANDARD				
	32	SOLENOID VALVE	-				
ACCESSORIES	33	ELETTRICAL CONNECTION	-				
	34	VOLTAGE	-				
	35	INDICATION	-				
	36	LIMIT SWITCH OPEN	-				
	37	LIMIT SWITCH CLOSED	-				
	38	MOUNTING KIT	-				
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID	
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80
	PROJECT FLOW						
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C		
	DENSITY @ OPERATING CONDITION			- kg/m³			
	VISCOSITY @ OPERATING CONDITION			- Cp			
	FLUID CONDUCTIVITY			- μS/cm²			
	INCROSTATION			-		-	
	SUSPENDED SOLIDS (%)			-		-	
	MAXIMUM LOSS OF LOAD ALLOWED			-		-	
	MANUFACTURER			GEMU OR SIMILAR			
	MODEL						



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AUTOMATED DIAPHRAGM VALVE

SHEET:
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REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770242 / 7B-XV-770241 / 7B-XV-800005									
	2	SERVICE	CIP SYSTEM N°2									
	3	P&ID	7B-Z-0-2-48									
	4	MAIN LINE Ø	SERVICE LINE Nº		2"-CIP2R-770224-SS10-PP	2"-CIP2S-770223-SS10-PP						
	5	VALVE TYPE	DIAPHRAGM									
	6	AREA CLASSIFICATION	NOT CLASSIFIED									
	7	ENCLOSURE CLASSIFICATION	IP-65									
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG									
	10	BODY SIZE	2" PL / 2 " / 2" PL									
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L									
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL									
	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									
HANDLE	19	TYPE	-									
	20	COLOR	-									
	21	LOCKING YES / NO	-									
	22	EXTENDED	-									
ACTUATOR	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	ELECTRICAL CLASS	-									
	31	ENCLOSURE	MANUFACTURER STANDARD									
	32	SOLENOID VALVE	-									
ACCESSORIES	33	ELETTRICAL CONNECTION	-									
	34	VOLTAGE	-									
	35	INDICATION	-									
	36	LIMIT SWITCH OPEN	-									
	37	LIMIT SWITCH CLOSED	-									
	38	MOUNTING KIT	-									
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID						
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-					
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1					
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80					
	PROJECT FLOW											
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g	- °C							
	DENSITY @ OPERATING CONDITION				- kg/m³							
	VISCOSITY @ OPERATING CONDITION				- Cp							
	FLUID CONDUCTIVITY				- μS/cm²							
	INCROSTATION			-	-							
	SUSPENDED SOLIDS (%)			-	-							
	MAXIMUM LOSS OF LOAD ALLOWED			-	-							
	MANUFACTURER			GEMU OR SIMILAR								
	MODEL											



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770244 / 7B-XV-770243 / 7B-XV-800004				
	2	SERVICE	CIP SYSTEM N°2				
	3	P&ID	7B-Z-0-2-48				
	4	MAIN LINE Ø	SERVICE LINE Nº			2"-CIP2R-770224-SS10-PP	2"-CIP2R-770224-SS10-PP
	5	VALVE TYPE	DIAPHRAGM				
	6	AREA CLASSIFICATION	NOT CLASSIFIED				
	7	ENCLOSURE CLASSIFICATION	IP-65				
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6				
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG				
	10	BODY SIZE	2" PL / 2" / 2" PL				
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L				
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL				
	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				
HANDLE	19	TYPE	-				
	20	COLOR	-				
	21	LOCKING YES / NO	-				
	22	EXTENDED	-				
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-				
	31	ENCLOSURE	MANUFACTURER STANDARD				
	32	SOLENOID VALVE	-				
ACCESSORIES	33	ELECTRICAL CONNECTION	-				
	34	VOLTAGE	-				
	35	INDICATION	-				
	36	LIMIT SWITCH OPEN	-				
	37	LIMIT SWITCH CLOSED	-				
	38	MOUNTING KIT	-				
SERVICE	FLUID	PHYSICAL STATUS			PRODUCT		LIQUID
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80
	PROJECT FLOW						
	DESIGN PRESSURE	DESIGN TEMPERATURE			- bar-g	- °C	
	DENSITY @ OPERATING CONDITION				- kg/m³		
	VISCOSITY @ OPERATING CONDITION				- Cp		
	FLUID CONDUCTIVITY				- μS/cm²		
	INCROSTATION				-		
	SUSPENDED SOLIDS (%)				-		
	MAXIMUM LOSS OF LOAD ALLOWED				-		
	MANUFACTURER				GEMU OR SIMILAR		
	MODEL						



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CLIENT NR: PRD-AIC-DSH-043

TITLE

AUTOMATED DIAPHRAGM VALVE

SHEET:
83 of 116
REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770248 / 7B-XV-770247 / 7B-XV-800003									
	2	SERVICE	CIP SYSTEM N°2									
	3	P&ID	7B-Z-0-2-48									
	4	MAIN LINE Ø	SERVICE LINE Nº		2"-CIP2S-770223-SS10-PP	2"-CIP2S-770223-SS10-PP						
	5	VALVE TYPE	DIAPHRAGM									
	6	AREA CLASSIFICATION	NOT CLASSIFIED									
	7	ENCLOSURE CLASSIFICATION	IP-65									
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG									
	10	BODY SIZE	2" PL / 2" PL									
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L									
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL									
	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									
HANDLE	19	TYPE	-									
	20	COLOR	-									
	21	LOCKING YES / NO	-									
	22	EXTENDED	-									
ACTUATOR	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	ELECTRICAL CLASS	-									
	31	ENCLOSURE	MANUFACTURER STANDARD									
	32	SOLENOID VALVE	-									
ACCESSORIES	33	ELETTRICAL CONNECTION	-									
	34	VOLTAGE	-									
	35	INDICATION	-									
	36	LIMIT SWITCH OPEN	-									
	37	LIMIT SWITCH CLOSED	-									
	38	MOUNTING KIT	-									
	FLUID		PRODUCT									
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-				
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	1				
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	80				
	PROJECT FLOW		-									
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C						
	DENSITY @ OPERATING CONDITION		-									
	VISCOSITY @ OPERATING CONDITION		-									
	FLUID CONDUCTIVITY		-									
	INCROSTATION		-									
	SUSPENDED SOLIDS (%)		-									
	MAXIMUM LOSS OF LOAD ALLOWED		-									
	MANUFACTURER		GEMU OR SIMILAR									
	MODEL											



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

TITLE

SHEET:
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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770319 / 7B-XV-770318									
	2	SERVICE	CIP SYSTEM N°3									
	3	P&ID	7B-Z-0-2-50									
	4	MAIN LINE Ø	SERVICE LINE Nº		2"-CIP3S-770301-SS10-PP	2"-CIP3S-770301-SS10-PP						
	5	VALVE TYPE	DIAPHRAGM									
	6	AREA CLASSIFICATION	NOT CLASSIFIED									
	7	ENCLOSURE CLASSIFICATION	IP-65									
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG									
	10	BODY SIZE	2" PL / 2" PL									
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L									
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL									
	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									
HANDLE	19	TYPE	-									
	20	COLOR	-									
	21	LOCKING YES / NO	-									
	22	EXTENDED	-									
ACTUATOR	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	ELECTRICAL CLASS	-									
	31	ENCLOSURE	MANUFACTURER STANDARD									
	32	SOLENOID VALVE	-									
ACCESSORIES	33	ELETTRICAL CONNECTION	-									
	34	VOLTAGE	-									
	35	INDICATION	-									
	36	LIMIT SWITCH OPEN	-									
	37	LIMIT SWITCH CLOSED	-									
	38	MOUNTING KIT	-									
	FLUID		PRODUCT									
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-				
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	1				
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	80				
	PROJECT FLOW		-									
	DESIGN PRESSURE	DESIGN TEMPERATURE		bar-g		°C						
	DENSITY @ OPERATING CONDITION		-									
	VISCOSITY @ OPERATING CONDITION		-									
	FLUID CONDUCTIVITY		-									
	INCROSTATION		-									
	SUSPENDED SOLIDS (%)		-									
	MAXIMUM LOSS OF LOAD ALLOWED		-									
	MANUFACTURER		GEMU OR SIMILAR									
	MODEL											



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

TITLE

SHEET:
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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770322 / 7B-XV-770323								
	2	SERVICE	CIP SYSTEM N°3								
	3	P&ID	7B-Z-0-2-50								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP3S-770301-SS10-PP	2"-CIP3S-770302-SS10-PP			DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED								
	6	AREA CLASSIFICATION	IP-65								
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6								
	8	CERTIFICATES									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 2" / 2" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELECTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
	FLUID		PRODUCT								
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-			
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	80			
	PROJECT FLOW										
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g								
	DENSITY @ OPERATING CONDITION		kg/m³								
	VISCOSITY @ OPERATING CONDITION		Cp								
	FLUID CONDUCTIVITY		μS/cm²								
	INCROSTATION		-								
	SUSPENDED SOLIDS (%)		-								
	MAXIMUM LOSS OF LOAD ALLOWED		-								
	MANUFACTURER		GEMU OR SIMILAR								
	MODEL										



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CLIENT NR: PRD-AIC-DSH-043

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SHEET:
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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770325 / 7B-XV-770324								
	2	SERVICE	CIP SYSTEM N°3								
	3	P&ID	7B-Z-0-2-50								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP3S-770301-SS10-PP	2"-CIP3S-770301-SS10-PP						
	5	VALVE TYPE	DIAPHRAGM								
	6	AREA CLASSIFICATION	NOT CLASSIFIED								
	7	ENCLOSURE CLASSIFICATION	IP-65								
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6								
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 2" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
	FLUID		PRODUCT								
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-			
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	80			
	PROJECT FLOW		-								
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g								
	DENSITY @ OPERATING CONDITION		kg/m³								
	VISCOSITY @ OPERATING CONDITION		Cp								
	FLUID CONDUCTIVITY		μS/cm²								
	INCROSTATION		-								
	SUSPENDED SOLIDS (%)		-								
	MAXIMUM LOSS OF LOAD ALLOWED		-								
	MANUFACTURER		GEMU OR SIMILAR								
	MODEL										



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

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SHEET:
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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770327 / 7B-XV-770326								
	2	SERVICE	CIP SYSTEM N°3								
	3	P&ID	7B-Z-0-2-50								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP3S-770301-SS10-PP	2"-CIP3S-770301-SS10-PP						
	5	VALVE TYPE	DIAPHRAGM								
	6	AREA CLASSIFICATION	NOT CLASSIFIED								
	7	ENCLOSURE CLASSIFICATION	IP-65								
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6								
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 2" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
	FLUID		PRODUCT								
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-			
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	80			
	PROJECT FLOW		-								
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g								
	DENSITY @ OPERATING CONDITION		kg/m³								
	VISCOSITY @ OPERATING CONDITION		Cp								
	FLUID CONDUCTIVITY		μS/cm²								
	INCROSTATION		-								
	SUSPENDED SOLIDS (%)		-								
	MAXIMUM LOSS OF LOAD ALLOWED		-								
	MANUFACTURER		GEMU OR SIMILAR								
	MODEL										



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770329 / 7B-XV-770328								
	2	SERVICE	CIP SYSTEM N°3								
	3	P&ID	7B-Z-0-2-50								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP3S-770301-SS10-PP	2"-CIP3S-770301-SS10-PP						
	5	VALVE TYPE	DIAPHRAGM								
	6	AREA CLASSIFICATION	NOT CLASSIFIED								
	7	ENCLOSURE CLASSIFICATION	IP-65								
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6								
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 2" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
	FLUID		PRODUCT								
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-			
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	80			
	PROJECT FLOW		-								
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g								
	DENSITY @ OPERATING CONDITION		-								
	VISCOSITY @ OPERATING CONDITION		kg/m³								
	FLUID CONDUCTIVITY		-								
	INCROSTATION		Cp								
	SUSPENDED SOLIDS (%)		-								
	MAXIMUM LOSS OF LOAD ALLOWED		μS/cm²								
	MANUFACTURER		GEMU OR SIMILAR								
	MODEL										



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CLIENT NR: PRD-AIC-DSH-043

TITLE

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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770320 / 7B-XV-770321								
	2	SERVICE	CIP SYSTEM N°3								
	3	P&ID	7B-Z-0-2-50								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP3S-770301-SS10-PP	2"-CIP3S-770303-SS10-PP			DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED								
	6	AREA CLASSIFICATION	IP-65								
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6								
	8	CERTIFICATES									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 2" / 2" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
	FLUID		PRODUCT								
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-			
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	80			
	PROJECT FLOW										
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g								
	DENSITY @ OPERATING CONDITION		kg/m³								
	VISCOSITY @ OPERATING CONDITION		Cp								
	FLUID CONDUCTIVITY		μS/cm²								
	INCROSTATION		-								
	SUSPENDED SOLIDS (%)		-								
	MAXIMUM LOSS OF LOAD ALLOWED		-								
	MANUFACTURER		GEMU OR SIMILAR								
	MODEL										



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

TITLE

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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770330_7B-XV-770331								
	2	SERVICE	CIP SYSTEM N°3								
	3	P&ID	7B-Z-0-2-50								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP3S-770301-SS10-PP	2"-CIP3S-770310-SS10-PP						
	5	VALVE TYPE	DIAPHRAGM								
	6	AREA CLASSIFICATION	NOT CLASSIFIED								
	7	ENCLOSURE CLASSIFICATION	IP-65								
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6								
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 2" / 2" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
	FLUID		PRODUCT								
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-			
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	80			
	PROJECT FLOW		-								
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g								
	DENSITY @ OPERATING CONDITION		kg/m³								
	VISCOSITY @ OPERATING CONDITION		Cp								
	FLUID CONDUCTIVITY		μS/cm²								
	INCROSTATION		-								
	SUSPENDED SOLIDS (%)		-								
	MAXIMUM LOSS OF LOAD ALLOWED		-								
	MANUFACTURER		GEMU OR SIMILAR								
	MODEL										



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

TITLE

SHEET:
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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770340 / 7B-XV-770341						
	2	SERVICE	CIP SYSTEM N°3						
	3	P&ID	7B-Z-0-2-51						
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP3S-770311-SS10-PP	1 1/2"-CIP3R-770320-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED						
	6	AREA CLASSIFICATION	IP-65						
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6						
	8	CERTIFICATES							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	2" PL / 1.1/2" / 2" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW								
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C				
	DENSITY @ OPERATING CONDITION			- kg/m³					
	VISCOSITY @ OPERATING CONDITION			- Cp					
	FLUID CONDUCTIVITY			- μS/cm²					
	INCROSTATION			-		-			
	SUSPENDED SOLIDS (%)			-		-			
	MAXIMUM LOSS OF LOAD ALLOWED			-		-			
	MANUFACTURER			GEMU OR SIMILAR					
	MODEL								



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CLIENT NR: PRD-AIC-DSH-043

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SHEET:
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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770342 / 7B-XV-770343								
	2	SERVICE	CIP SYSTEM N°3								
	3	P&ID	7B-Z-0-2-51								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP3S-770311-SS10-PP	3/4"-CIP3R-770321-SS10-PP	DIAPHRAGM					
	5	VALVE TYPE	NOT CLASSIFIED								
	6	AREA CLASSIFICATION	IP-65								
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6								
	8	CERTIFICATES									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 3/4" / 2" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
		FLUID	PRODUCT								
SERVICE		MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-				
		MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	1				
		MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	80				
		PROJECT FLOW									
		DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C					
		DENSITY @ OPERATING CONDITION	- kg/m³								
		VISCOSITY @ OPERATING CONDITION	- Cp								
		FLUID CONDUCTIVITY	- μS/cm²								
		INCROSTATION	-								
		SUSPENDED SOLIDS (%)	-								
		MAXIMUM LOSS OF LOAD ALLOWED	-								
		MANUFACTURER	GEMU OR SIMILAR								
		MODEL									



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SHEET:
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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770345 / 7B-XV-770344								
	2	SERVICE	CIP SYSTEM N°3								
	3	P&ID	7B-Z-0-2-51								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP3S-770311-SS10-PP	1"-CIP3R-770322-SS10-PP			DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED								
	6	AREA CLASSIFICATION	IP-65								
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6								
	8	CERTIFICATES									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 1" / 2" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
	FLUID		PRODUCT								
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-			
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	80			
	PROJECT FLOW										
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g								
	DENSITY @ OPERATING CONDITION		kg/m³								
	VISCOSITY @ OPERATING CONDITION		Cp								
	FLUID CONDUCTIVITY		μS/cm²								
	INCROSTATION		-								
	SUSPENDED SOLIDS (%)		-								
	MAXIMUM LOSS OF LOAD ALLOWED		-								
	MANUFACTURER		GEMU OR SIMILAR								
	MODEL										



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770347 / 7B-XV-770346								
	2	SERVICE	CIP SYSTEM N°3								
	3	P&ID	7B-Z-0-2-51								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP3S-770311-SS10-PP	1"-CIP3R-770323-SS10-PP			DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED								
	6	AREA CLASSIFICATION	IP-65								
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6								
	8	CERTIFICATES									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 1 " / 2" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELECTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
	FLUID		PRODUCT								
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-			
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	80			
	PROJECT FLOW										
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g								
	DENSITY @ OPERATING CONDITION		kg/m³								
	VISCOSITY @ OPERATING CONDITION		Cp								
	FLUID CONDUCTIVITY		μS/cm²								
	INCROSTATION		-								
	SUSPENDED SOLIDS (%)		-								
	MAXIMUM LOSS OF LOAD ALLOWED		-								
	MANUFACTURER		GEMU OR SIMILAR								
	MODEL										



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770349 / 7B-XV-770348						
	2	SERVICE	CIP SYSTEM N°3						
	3	P&ID	7B-Z-0-2-51						
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP3S-770311-SS10-PP	2"-CIP3R-770324-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED						
	6	AREA CLASSIFICATION	IP-65						
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6						
	8	CERTIFICATES							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	2" PL / 2" / 2" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		PRODUCT		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	1		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW								
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C				
	DENSITY @ OPERATING CONDITION		- kg/m³						
	VISCOSITY @ OPERATING CONDITION		- Cp						
	FLUID CONDUCTIVITY		- μS/cm²						
	INCROSTATION		-		-				
	SUSPENDED SOLIDS (%)		-		-				
	MAXIMUM LOSS OF LOAD ALLOWED		-		-				
	MANUFACTURER		GEMU OR SIMILAR						
	MODEL								



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770351 / 7B-XV-770350								
	2	SERVICE	CIP SYSTEM N°3								
	3	P&ID	7B-Z-0-2-51								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP3S-770311-SS10-PP	2"-CIP3R-770325-SS10-PP			DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED								
	6	AREA CLASSIFICATION	IP-65								
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6								
	8	CERTIFICATES									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 2" / 2" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELECTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
	FLUID		PRODUCT								
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-			
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	80			
	PROJECT FLOW										
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g								
	DENSITY @ OPERATING CONDITION		kg/m³								
	VISCOSITY @ OPERATING CONDITION		Cp								
	FLUID CONDUCTIVITY		μS/cm²								
	INCROSTATION		-								
	SUSPENDED SOLIDS (%)		-								
	MAXIMUM LOSS OF LOAD ALLOWED		-								
	MANUFACTURER		GEMU OR SIMILAR								
	MODEL										



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-770353 / 7B-XV-770352								
	2	SERVICE	CIP SYSTEM N°3								
	3	P&ID	7B-Z-0-2-51								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CIP3S-770311-SS10-PP	2"-CIP3R-770326-SS10-PP			DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED								
	6	AREA CLASSIFICATION	IP-65								
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6								
	8	CERTIFICATES									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 2" / 2" PL								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL								
	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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
	FLUID		PRODUCT								
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-			
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	1			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	80			
	PROJECT FLOW										
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g								
	DENSITY @ OPERATING CONDITION		kg/m³								
	VISCOSITY @ OPERATING CONDITION		Cp								
	FLUID CONDUCTIVITY		μS/cm²								
	INCROSTATION		-								
	SUSPENDED SOLIDS (%)		-								
	MAXIMUM LOSS OF LOAD ALLOWED		-								
	MANUFACTURER		GEMU OR SIMILAR								
	MODEL										

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2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-470108A/B						
	2	SERVICE	CIP SYSTEM N°3						
	3	P&ID	7B-Z-0-2-55						
	4	MAIN LINE Ø	SERVICE LINE N°	1 1/2"-CIPR-470107-SS3-PP	3/4"-SFIC-470110-SS5-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED						
	6	AREA CLASSIFICATION	IP-65						
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6						
	8	CERTIFICATES							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1.1/2" PL / 3/4" PL						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-PL						
	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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS			PRODUCT	LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80		
	PROJECT FLOW	-				-			
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g			- °C			
	DENSITY @ OPERATING CONDITION	-				- kg/m³			
	VISCOSITY @ OPERATING CONDITION	-				- Cp			
	FLUID CONDUCTIVITY	-				- μS/cm²			
	INCROSTATION	-				-			
	SUSPENDED SOLIDS (%)	-				-			
	MAXIMUM LOSS OF LOAD ALLOWED	-				-			
	MANUFACTURER	GEMU OR SIMILAR				-			
	MODEL	-				-			



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CLIENT NR: PRD-AIC-DSH-043

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AUTOMATED DIAPHRAGM VALVE

REV.: 2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-630203							
	2	SERVICE	PURIFIED WATER							
	3	P&ID	7B-Z-0-2-58							
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CPW-630205-SS10-NI	1 1/2"-CPW-630217-SS10-NI					
	5	VALVE TYPE	DIAPHRAGM							
	6	AREA CLASSIFICATION	NOT CLASSIFIED							
	7	ENCLOSURE CLASSIFICATION	IP-65							
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	2" PL / 1.1/2" TC / 2"TC							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC / SH3-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							
HANDLE	19	TYPE	-							
	20	COLOR	-							
	21	LOCKING YES / NO	-							
	22	EXTENDED	-							
ACTUATOR	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	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
ACCESSORIES	33	ELETTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	-							
	37	LIMIT SWITCH CLOSED	-							
	38	MOUNTING KIT	-							
SERVICE	FLUID	PHYSICAL STATUS		WATER		LIQUID				
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	20			
	PROJECT FLOW			-		-				
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C					
	DENSITY @ OPERATING CONDITION			kg/m³						
	VISCOSITY @ OPERATING CONDITION			Cp						
	FLUID CONDUCTIVITY			μS/cm²						
	INCROSTATION			-		-				
	SUSPENDED SOLIDS (%)			-		-				
	MAXIMUM LOSS OF LOAD ALLOWED			-		-				
	MANUFACTURER			GEMU OR SIMILAR						
	MODEL									



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-630204							
	2	SERVICE	PURIFIED WATER							
	3	P&ID	7B-Z-0-2-58							
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CPW-630205-SS10-NI	1 1/2"-CPW-630218-SS10-NI					
	5	VALVE TYPE	DIAPHRAGM							
	6	AREA CLASSIFICATION	NOT CLASSIFIED							
	7	ENCLOSURE CLASSIFICATION	IP-65							
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	2" PL / 1.1/2" TC / 2"TC							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC / SH3-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							
HANDLE	17	PIPING MATERIAL SPECIFICATION	STAINLESS STEEL ASTM A270 Gr. TP316L							
	18	BLOWOUT PROOF STEM	MANUFACTURER STANDARD							
	19	TYPE	-							
	20	COLOR	-							
ACTUATOR	21	LOCKING YES / NO	-							
	22	EXTENDED	-							
	23	TYPE 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							
ACCESSORIES	29	HOUSING MATERIAL	MANUFACTURER STANDARD							
	30	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
	33	ELECTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	-							
SERVICE	37	LIMIT SWITCH CLOSED	-							
	38	MOUNTING KIT	-							
	FLUID		PHYSICAL STATUS		WATER		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	20			
	PROJECT FLOW		-		-		-			
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g		- °C				
DENSITY @ OPERATING CONDITION				- kg/m³						
VISCOSITY @ OPERATING CONDITION				- Cp						
FLUID CONDUCTIVITY				- μS/cm²						
INCROSTATION				-		-				
SUSPENDED SOLIDS (%)				-		-				
MAXIMUM LOSS OF LOAD ALLOWED				-		-				
MANUFACTURER				GEMU OR SIMILAR						
MODEL										



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-630205								
	2	SERVICE	PURIFIED WATER								
	3	P&ID	7B-Z-0-2-58								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CPW-630205-SS10-NI	1 1/2"-CPW-630219-SS10-NI			DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED								
	6	AREA CLASSIFICATION	IP-65								
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6								
	8	CERTIFICATES									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 1.1/2" TC / 2"TC								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC / SH3-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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	23	TYPE 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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELECTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
	FLUID		WATER								
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-			
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	2			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	20			
	PROJECT FLOW		-								
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g	°C						
	DENSITY @ OPERATING CONDITION		- kg/m³								
	VISCOSITY @ OPERATING CONDITION		- Cp								
	FLUID CONDUCTIVITY		- μS/cm²								
	INCROSTATION		-								
	SUSPENDED SOLIDS (%)		-								
	MAXIMUM LOSS OF LOAD ALLOWED		-								
	MANUFACTURER		GEMU OR SIMILAR								
	MODEL										



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-630207								
	2	SERVICE	PURIFIED WATER								
	3	P&ID	7B-Z-0-2-58								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CPW-630205-SS10-NI	3/4"-CPW-630221-SS10-NI			DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED								
	6	AREA CLASSIFICATION	IP-65								
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6								
	8	CERTIFICATES									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 3/4" TC / 2"TC								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC / SH3-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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
	FLUID		WATER								
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	-			
SERVICE	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	-	2			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	20			
	PROJECT FLOW		-								
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g	°C						
	DENSITY @ OPERATING CONDITION		- kg/m³								
	VISCOSITY @ OPERATING CONDITION		- Cp								
	FLUID CONDUCTIVITY		- μS/cm²								
	INCROSTATION		-								
	SUSPENDED SOLIDS (%)		-								
	MAXIMUM LOSS OF LOAD ALLOWED		-								
	MANUFACTURER		GEMU OR SIMILAR								
	MODEL										



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-630208							
	2	SERVICE	PURIFIED WATER							
	3	P&ID	7B-Z-0-2-58							
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CPW-630205-SS10-NI	3/4"-CPW-630222-SS10-NI					
	5	VALVE TYPE	DIAPHRAGM							
	6	AREA CLASSIFICATION	NOT CLASSIFIED							
	7	ENCLOSURE CLASSIFICATION	IP-65							
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	2" PL / 3/4" TC / 2"TC							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC / SH3-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							
HANDLE	17	PIPING MATERIAL SPECIFICATION	STAINLESS STEEL ASTM A270 Gr. TP316L							
	18	BLOWOUT PROOF STEM	MANUFACTURER STANDARD							
	19	TYPE	-							
	20	COLOR	-							
ACTUATOR	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							
ACCESSORIES	29	HOUSING MATERIAL	MANUFACTURER STANDARD							
	30	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
	33	ELETTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	-							
SERVICE	37	LIMIT SWITCH CLOSED	-							
	38	MOUNTING KIT	-							
	FLUID		PHYSICAL STATUS		WATER		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	20			
	PROJECT FLOW		-		-		-			
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C		-			
DENSITY @ OPERATING CONDITION		-		kg/m³		-				
VISCOSITY @ OPERATING CONDITION		-		Cp		-				
FLUID CONDUCTIVITY		-		μS/cm²		-				
INCROSTATION		-		-		-				
SUSPENDED SOLIDS (%)		-		-		-				
MAXIMUM LOSS OF LOAD ALLOWED		-		-		-				
MANUFACTURER		GEMU OR SIMILAR								
MODEL										



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-630209							
	2	SERVICE	PURIFIED WATER							
	3	P&ID	7B-Z-0-2-58							
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-CPW-630205-SS10-NI	3/4"-FH-630201					
	5	VALVE TYPE	DIAPHRAGM							
	6	AREA CLASSIFICATION	NOT CLASSIFIED							
	7	ENCLOSURE CLASSIFICATION	IP-65							
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG							
	10	BODY SIZE	2" PL / 3/4" TC / 2"TC							
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L							
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC / SH3-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							
HANDLE	19	TYPE	-							
	20	COLOR	-							
	21	LOCKING YES / NO	-							
	22	EXTENDED	-							
ACTUATOR	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	ELECTRICAL CLASS	-							
	31	ENCLOSURE	MANUFACTURER STANDARD							
	32	SOLENOID VALVE	-							
ACCESSORIES	33	ELETTRICAL CONNECTION	-							
	34	VOLTAGE	-							
	35	INDICATION	-							
	36	LIMIT SWITCH OPEN	YES							
	37	LIMIT SWITCH CLOSED	YES							
	38	MOUNTING KIT	-							
SERVICE	FLUID	PHYSICAL STATUS		WATER		LIQUID				
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2			
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	20			
	PROJECT FLOW			-		-				
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C					
	DENSITY @ OPERATING CONDITION			kg/m³						
	VISCOSITY @ OPERATING CONDITION			Cp						
	FLUID CONDUCTIVITY			μS/cm²						
	INCROSTATION			-		-				
	SUSPENDED SOLIDS (%)			-		-				
	MAXIMUM LOSS OF LOAD ALLOWED			-		-				
	MANUFACTURER			GEMU OR SIMILAR						
	MODEL									



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-640103								
	2	SERVICE	HOT HWFI								
	3	P&ID	7B-Z-0-2-61								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-HWFI-640105-SS10-HC		1 1/2"-HWFI-640109-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM								
	6	AREA CLASSIFICATION	NOT CLASSIFIED								
	7	ENCLOSURE CLASSIFICATION	IP-65								
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6								
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 1.1/2" TC / 1/2"TC								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC/ SH3-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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
SERVICE	FLUID	PHYSICAL STATUS		WATER		LIQUID					
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-				
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2				
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80				
	PROJECT FLOW			-		-					
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C						
	DENSITY @ OPERATING CONDITION			- kg/m³							
	VISCOSITY @ OPERATING CONDITION			- Cp							
	FLUID CONDUCTIVITY			- μS/cm²							
	INCROSTATION			-		-					
MANUFACTURER	SUSPENDED SOLIDS (%)			-		-					
	MAXIMUM LOSS OF LOAD ALLOWED			-		-					
	MANUFACTURER			GEMU OR SIMILAR							
	MODEL										



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AUTOMATED DIAPHRAGM VALVE

REV.: 2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-640104								
	2	SERVICE	HOT HWFI								
	3	P&ID	7B-Z-0-2-61								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-HWFI-640105-SS10-HC		1 1/2"-HWFI-640110-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM								
	6	AREA CLASSIFICATION	NOT CLASSIFIED								
	7	ENCLOSURE CLASSIFICATION	IP-65								
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6								
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 1.1/2" TC / 1/2"TC								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC/ SH3-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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
SERVICE	FLUID	PHYSICAL STATUS		WATER		LIQUID					
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-				
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2				
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80				
	PROJECT FLOW			-		-					
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C						
	DENSITY @ OPERATING CONDITION			- kg/m³							
	VISCOSITY @ OPERATING CONDITION			- Cp							
	FLUID CONDUCTIVITY			- μS/cm²							
	INCROSTATION			-		-					
MANUFACTURER	SUSPENDED SOLIDS (%)			-		-					
	MAXIMUM LOSS OF LOAD ALLOWED			-		-					
MODEL	MANUFACTURER			GEMU OR SIMILAR							
	MODEL										



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

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SHEET:
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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-640105								
	2	SERVICE	HOT HWFI								
	3	P&ID	7B-Z-0-2-61								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-HWFI-640105-SS10-HC		1 1/2"-HWFI-640111-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM								
	6	AREA CLASSIFICATION	NOT CLASSIFIED								
	7	ENCLOSURE CLASSIFICATION	IP-65								
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6								
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 1.1/2" TC / 1/2"TC								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC/ SH3-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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
SERVICE	FLUID	PHYSICAL STATUS		WATER		LIQUID					
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-				
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2				
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80				
	PROJECT FLOW			-		-					
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C						
	DENSITY @ OPERATING CONDITION			kg/m³							
	VISCOSITY @ OPERATING CONDITION			Cp							
	FLUID CONDUCTIVITY			μS/cm²							
	INCROSTATION			-		-					
	SUSPENDED SOLIDS (%)			-		-					
	MAXIMUM LOSS OF LOAD ALLOWED			-		-					
	MANUFACTURER	GEMU OR SIMILAR									
	MODEL										



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

TITLE

SHEET:
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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-640106								
	2	SERVICE	HOT HWFI								
	3	P&ID	7B-Z-0-2-61								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-HWFI-640105-SS10-HC		1"-HWFI-640112-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM								
	6	AREA CLASSIFICATION	NOT CLASSIFIED								
	7	ENCLOSURE CLASSIFICATION	IP-65								
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6								
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 1" TC / 1/2"TC								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC/ SH3-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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
SERVICE	FLUID	PHYSICAL STATUS		WATER		LIQUID					
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-				
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2				
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80				
	PROJECT FLOW			-		-					
	DESIGN PRESSURE	DESIGN TEMPERATURE	- bar-g		- °C						
	DENSITY @ OPERATING CONDITION			- kg/m³							
	VISCOSITY @ OPERATING CONDITION			- Cp							
	FLUID CONDUCTIVITY			- μS/cm²							
	INCROSTATION			-		-					
	SUSPENDED SOLIDS (%)			-		-					
	MAXIMUM LOSS OF LOAD ALLOWED			-		-					
	MANUFACTURER			GEMU OR SIMILAR							
	MODEL										



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CLIENT NR: PRD-AIC-DSH-043

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SHEET:
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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-640107								
	2	SERVICE	HOT HWFI								
	3	P&ID	7B-Z-0-2-61								
	4	MAIN LINE Ø	SERVICE LINE Nº	2"-HWFI-640105-SS10-HC		1"-HWFI-640113-SS10-PP					
	5	VALVE TYPE	DIAPHRAGM								
	6	AREA CLASSIFICATION	NOT CLASSIFIED								
	7	ENCLOSURE CLASSIFICATION	IP-65								
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6								
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	2" PL / 1" TC / 1/2"TC								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC/ SH3-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								
HANDLE	17	PIPING MATERIAL SPECIFICATION	STAINLESS STEEL ASTM A270 Gr. TP316L								
	18	BLOWOUT PROOF STEM	MANUFACTURER STANDARD								
	19	TYPE	-								
	20	COLOR	-								
ACTUATOR	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
	23	TYPE 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								
ACCESSORIES	29	HOUSING MATERIAL	MANUFACTURER STANDARD								
	30	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
	33	ELECTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
SERVICE	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
	FLUID		PHYSICAL STATUS		WATER		LIQUID				
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-				
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2				
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	80				
	PROJECT FLOW		-		-		-				
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C		-				
DENSITY @ OPERATING CONDITION		-		kg/m³		-					
VISCOSITY @ OPERATING CONDITION		-		Cp		-					
FLUID CONDUCTIVITY		-		μS/cm²		-					
INCROSTATION		-		-		-					
SUSPENDED SOLIDS (%)		-		-		-					
MAXIMUM LOSS OF LOAD ALLOWED		-		-		-					
MANUFACTURER		GEMU OR SIMILAR									
MODEL											



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-920101						
	2	SERVICE	HOT/AMBIENT WFI						
	3	P&ID	7B-Z-0-2-62						
	4	MAIN LINE Ø	SERVICE LINE Nº	1 1/2"-AWFI-920105-SS10-PP	1 1/2"-AWFI-920107-SS10-PP				
	5	VALVE TYPE	DIAPHRAGM						
	6	AREA CLASSIFICATION	NOT CLASSIFIED						
	7	ENCLOSURE CLASSIFICATION	IP-65						
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1.1/2" PL / 1.1/2" TC / 1/2"TC						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC/ SH3-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						
HANDLE	17	PIPING MATERIAL SPECIFICATION	STAINLESS STEEL ASTM A270 Gr. TP316L						
	18	BLOWOUT PROOF STEM	MANUFACTURER STANDARD						
	19	TYPE	-						
	20	COLOR	-						
ACTUATOR	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
	23	TYPE 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						
ACCESSORIES	29	HOUSING MATERIAL	MANUFACTURER STANDARD						
	30	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
	33	ELECTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
SERVICE	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
	FLUID		PHYSICAL STATUS		WATER		LIQUID		
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	20		
	PROJECT FLOW		-		-				
	DESIGN PRESSURE	DESIGN TEMPERATURE			bar-g		°C		
DENSITY @ OPERATING CONDITION				-		kg/m³			
VISCOSITY @ OPERATING CONDITION				-		Cp			
FLUID CONDUCTIVITY				-		μS/cm²			
INCROSTATION				-		-			
SUSPENDED SOLIDS (%)				-		-			
MAXIMUM LOSS OF LOAD ALLOWED				-		-			
MANUFACTURER				GEMU OR SIMILAR					
MODEL									



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-920102								
	2	SERVICE	HOT/AMBIENT WFI								
	3	P&ID	7B-Z-0-2-62								
	4	MAIN LINE Ø	SERVICE LINE Nº	1 1/2"-AWFI-920105-SS10-PP	1"-AWFI-920108-SS10-PP	DIAPHRAGM					
	5	VALVE TYPE	NOT CLASSIFIED								
	6	AREA CLASSIFICATION	IP-65								
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6								
	8	CERTIFICATES									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	1.1/2" PL / 1" TC / 1/2"TC								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC/ SH3-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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
SERVICE	FLUID	PHYSICAL STATUS		WATER		LIQUID					
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-				
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2				
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	20				
	PROJECT FLOW			-		-					
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C						
	DENSITY @ OPERATING CONDITION			kg/m³							
	VISCOSITY @ OPERATING CONDITION			Cp							
	FLUID CONDUCTIVITY			μS/cm²							
	INCROSTATION			-		-					
	SUSPENDED SOLIDS (%)			-		-					
	MAXIMUM LOSS OF LOAD ALLOWED			-		-					
	MANUFACTURER	GEMU OR SIMILAR									
	MODEL										



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-920103								
	2	SERVICE	HOT/AMBIENT WFI								
	3	P&ID	7B-Z-0-2-62								
	4	MAIN LINE Ø	SERVICE LINE Nº	1 1/2"-AWFI-920105-SS10-PP	1"-AWFI-920109-SS10-PP	DIAPHRAGM					
	5	VALVE TYPE	NOT CLASSIFIED								
	6	AREA CLASSIFICATION	IP-65								
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6								
	8	CERTIFICATES									
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG								
	10	BODY SIZE	1.1/2" PL / 1" TC / 1/2"TC								
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L								
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC/ SH3-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								
HANDLE	19	TYPE	-								
	20	COLOR	-								
	21	LOCKING YES / NO	-								
	22	EXTENDED	-								
ACTUATOR	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	ELECTRICAL CLASS	-								
	31	ENCLOSURE	MANUFACTURER STANDARD								
	32	SOLENOID VALVE	-								
ACCESSORIES	33	ELETTRICAL CONNECTION	-								
	34	VOLTAGE	-								
	35	INDICATION	-								
	36	LIMIT SWITCH OPEN	-								
	37	LIMIT SWITCH CLOSED	-								
	38	MOUNTING KIT	-								
SERVICE	FLUID	PHYSICAL STATUS		WATER		LIQUID					
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-				
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2				
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	20				
	PROJECT FLOW			-		-					
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C						
	DENSITY @ OPERATING CONDITION			kg/m³							
	VISCOSITY @ OPERATING CONDITION			Cp							
	FLUID CONDUCTIVITY			μS/cm²							
	INCROSTATION			-		-					
	SUSPENDED SOLIDS (%)			-		-					
	MAXIMUM LOSS OF LOAD ALLOWED			-		-					
	MANUFACTURER	GEMU OR SIMILAR									
	MODEL										



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AUTOMATED DIAPHRAGM VALVE

REV.: 2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-920104						
	2	SERVICE	HOT/AMBIENT WFI						
	3	P&ID	7B-Z-0-2-62						
	4	MAIN LINE Ø	SERVICE LINE Nº	1 1/2"-AWFI-920105-SS10-PP	1 1/2"-AWFI-920110-SS10-PP				
	5	VALVE TYPE	DIAPHRAGM						
	6	AREA CLASSIFICATION	NOT CLASSIFIED						
	7	ENCLOSURE CLASSIFICATION	IP-65						
	8	CERTIFICATES	SEE NOTE 7 - PAGE 6						
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1.1/2" PL / 1.1/2" TC / "TC						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC/ SH3-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						
HANDLE	17	PIPING MATERIAL SPECIFICATION	STAINLESS STEEL ASTM A270 Gr. TP316L						
	18	BLOWOUT PROOF STEM	MANUFACTURER STANDARD						
	19	TYPE	-						
	20	COLOR	-						
ACTUATOR	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
	23	TYPE 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						
ACCESSORIES	29	HOUSING MATERIAL	MANUFACTURER STANDARD						
	30	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
	33	ELECTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	-						
SERVICE	37	LIMIT SWITCH CLOSED	-						
	38	MOUNTING KIT	-						
	FLUID		PHYSICAL STATUS		WATER		LIQUID		
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	20		
	PROJECT FLOW		-		-		-		
	DESIGN PRESSURE	DESIGN TEMPERATURE		- bar-g		- °C			
DENSITY @ OPERATING CONDITION				- kg/m³					
VISCOSITY @ OPERATING CONDITION				- Cp					
FLUID CONDUCTIVITY				- μS/cm²					
INCROSTATION				-		-			
SUSPENDED SOLIDS (%)				-		-			
MAXIMUM LOSS OF LOAD ALLOWED				-		-			
MANUFACTURER				GEMU OR SIMILAR					
MODEL									



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CLIENT NR: PRD-AIC-DSH-043

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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-920107						
	2	SERVICE	HOT/AMBIENT WFI						
	3	P&ID	7B-Z-0-2-62						
	4	MAIN LINE Ø	SERVICE LINE Nº	1 1/2"-AWFI-920105-SS10-PP	1 1/2"-AWFI-920105-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED						
	6	AREA CLASSIFICATION	IP-65						
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6						
	8	CERTIFICATES							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1.1/2"TC / 1.1/2" TC						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC/ SH3-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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	YES						
	37	LIMIT SWITCH CLOSED	YES						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		WATER		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	20		
	PROJECT FLOW		-		-				
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C				
	DENSITY @ OPERATING CONDITION		kg/m³						
	VISCOSITY @ OPERATING CONDITION		Cp						
	FLUID CONDUCTIVITY		μS/cm²						
	INCROSTATION		-		-				
	SUSPENDED SOLIDS (%)		-		-				
	MAXIMUM LOSS OF LOAD ALLOWED		-		-				
	MANUFACTURER		GEMU OR SIMILAR						
	MODEL								



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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-920106						
	2	SERVICE	HOT/AMBIENT WFI						
	3	P&ID	7B-Z-0-2-62						
	4	MAIN LINE Ø	SERVICE LINE Nº	1 1/2"-AWFI-920105-SS10-PP	1 1/2"-AWFI-920105-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED						
	6	AREA CLASSIFICATION	IP-65						
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6						
	8	CERTIFICATES							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1.1/2"TC / 1.1/2" TC						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC/ SH3-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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	YES						
	37	LIMIT SWITCH CLOSED	YES						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		WATER		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	20		
	PROJECT FLOW		-		-				
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C				
	DENSITY @ OPERATING CONDITION		kg/m³						
	VISCOSITY @ OPERATING CONDITION		Cp						
	FLUID CONDUCTIVITY		μS/cm²						
	INCROSTATION		-		-				
	SUSPENDED SOLIDS (%)		-		-				
	MAXIMUM LOSS OF LOAD ALLOWED		-		-				
	MANUFACTURER		GEMU OR SIMILAR						
	MODEL								



NUMBER: 569-DB7B-AIC-731-004

CLIENT NR: PRD-AIC-DSH-043

TITLE

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AUTOMATED DIAPHRAGM VALVE

REV.:
2

GENERAL	1	INSTRUMENT TAG NUMBER	7B-XV-920109						
	2	SERVICE	HOT/AMBIENT WFI						
	3	P&ID	7B-Z-0-2-62						
	4	MAIN LINE Ø	SERVICE LINE Nº	1 1/2"-AWFI-920105-SS10-PP	1 1/2"-AWFI-920105-SS10-PP	DIAPHRAGM			
	5	VALVE TYPE	NOT CLASSIFIED						
	6	AREA CLASSIFICATION	IP-65						
	7	ENCLOSURE CLASSIFICATION	SEE NOTE 7 - PAGE 6						
	8	CERTIFICATES							
BODY	9	TYPE BODY	SANITARY VALVE TYPE DIAPHRAGM ZERO DEAD-LEG						
	10	BODY SIZE	1.1/2"TC / 1.1/2" TC						
	11	MATERIAL PIPE, CLASS.	STAINLESS STEEL AISI 316L						
	12	END CONNECTION, AND TYPE.	S1/H-PL/ S2/H-TC/ SH3-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						
HANDLE	19	TYPE	-						
	20	COLOR	-						
	21	LOCKING YES / NO	-						
	22	EXTENDED	-						
ACTUATOR	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	ELECTRICAL CLASS	-						
	31	ENCLOSURE	MANUFACTURER STANDARD						
	32	SOLENOID VALVE	-						
ACCESSORIES	33	ELETTRICAL CONNECTION	-						
	34	VOLTAGE	-						
	35	INDICATION	-						
	36	LIMIT SWITCH OPEN	YES						
	37	LIMIT SWITCH CLOSED	YES						
	38	MOUNTING KIT	-						
SERVICE	FLUID	PHYSICAL STATUS		WATER		LIQUID			
	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	2		
	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	20		
	PROJECT FLOW		-		-				
	DESIGN PRESSURE	DESIGN TEMPERATURE	bar-g		°C				
	DENSITY @ OPERATING CONDITION		kg/m³						
	VISCOSITY @ OPERATING CONDITION		Cp						
	FLUID CONDUCTIVITY		μS/cm²						
	INCROSTATION		-		-				
	SUSPENDED SOLIDS (%)		-		-				
	MAXIMUM LOSS OF LOAD ALLOWED		-		-				
	MANUFACTURER		GEMU OR SIMILAR						
	MODEL								