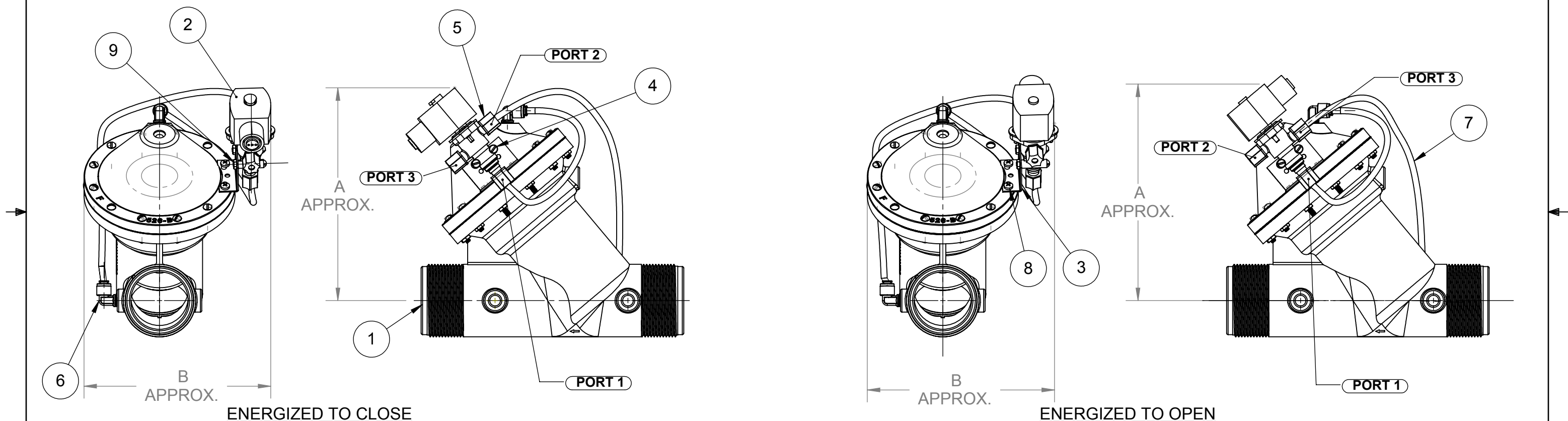


ITEM NO.	QTY.	PART NUMBER	DESCRIPTION	
1	1	-	DIAPHRAGM VALVE- NORMALLY OPEN	
2	1	1075637	110V.60Hz.	
		1075638	220V.50Hz.	
		1075639	24V.60Hz.	
3	1	1074783	BRACKET, SOLENOID MOUNTING	
4	2	1072377	RD HD MACH SCREW, (8-32 X1.25)	
5	3	1071939	PLASTIC , GRIPPER NUT	
6	2	1078769	90° ELBOW,1/8"NPTX1/4T,PLS	520-524
6	2	1078770	90° ELBOW,1/4"NPTX1/4T,PLS	526
7	N/A	1071936	TUBING, POLY 1/4" O.D. X .035	
8	2	3003551	SCREW, 10-32 X 1 1/2" SS	
9	2	1071646	NUT, HEX, 8-32	

REVISIONS					
ZONE	ECN	REV.	DESCRIPTION	DATE	APP'D
	100876	C	REDAWN IN SOLIDWORKS ADD DRY DRAIN VIEW	07-09-12	TJM
	1092	D	AQ-Matic REVIEW AND CORRECTIONS IMPLEMENTED	6/15/17	JJ

NOTE:  
1. LENGTH OF TUBING VARIES WITH EACH SIZE OF DIAPHRAGM VALVE.  
2. DIAPHRAGM VALVE IS NORMALLY OPEN, PRESSURE TO CLOSE.  
3. BOSS NO. 1 ON VALVE TAPPED 1/8" N.P.T. (520,521, 524) 1/4" N.P.T.(526)  
4. SEE PAGE 2 FOR DRY DRAIN OPTION.



**SOLENOID ENERGIZED.**  
UPSTREAM PRESSURE, FROM SOLENOID PORT 2 TO PORT 1, IS APPLIED TO UPPER DIAPHRAGM CHAMBER TO CLOSE THE DIAPHRAGM VALVE.

**SOLENOID DE-ENERGIZED.**  
PRESSURE FROM UPPER DIAPHRAGM CHAMBER IS VENTED. UPSTREAM PRESSURE OPENS THE DIAPHRAGM VALVE.

**SOLENOID DE-ENERGIZED.**  
UPSTREAM PRESSURE, FROM SOLENOID PORT 3 TO PORT 1, IS APPLIED TO UPPER DIAPHRAGM

**SOLENOID ENERGIZED.**  
PRESSURE FROM UPPER DIAPHRAGM CHAMBER IS VENTED. UPSTREAM PRESSURE OPENS THE DIAPHRAGM VALVE.

VALVE SERIES	PIPE SIZE	A	B
520	3/8", 1/2"	5.87	4.12
		149.1	104.6
521	3/4", 1"	6.52	5.12
		165.6	130.0
524	1-1/2", 2"	7.62	6.25
		193.5	158.75
526	2-1/2", 3"	9.62	7.87
		244.3	200.0

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TOLERANCES:  
ANGLES: ± 1°  
1 PLACE .X: ±.015  
2 PLACE .XX: ±.010  
3 PLACE .XXX: ±.005

THIRD ANGLE PROJECTION	
APPROVALS	DATE
DRAWN	
APPROVED	
CHECKED TRK	6/15/17

**AQ-Matic** AQ-Matic

TITLE: CATALOG SHEET, K520 - K526 SOLENOID OPERATED VALVES

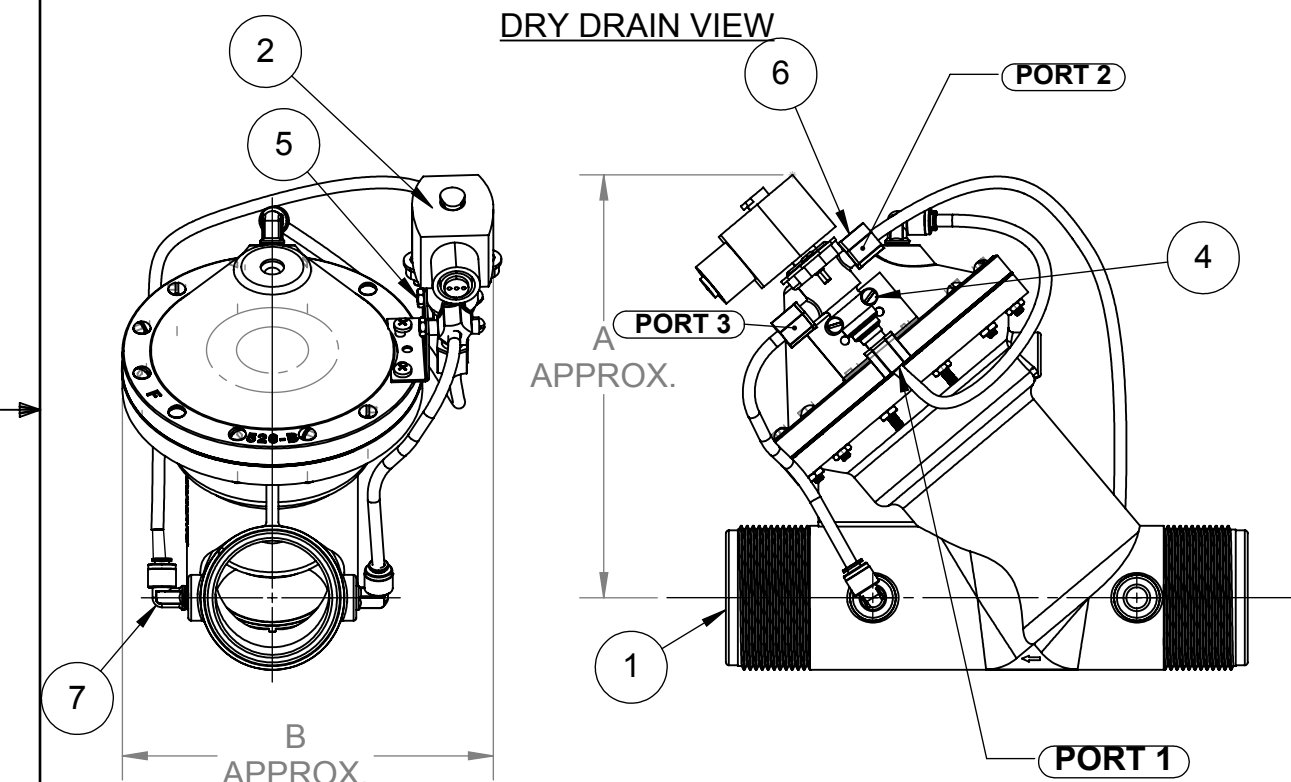
SIZE: B DWG NO. 1081312 REV D

SCALE: 1:4 SHEET 1 OF 3

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION	
1	1	-	DIAPHRAGM VALVE - NORMALLY OPEN	
2	1	1075637	110V.60Hz.	
		1075639	220V.50Hz.	
		1075638	24V.60Hz.	
3	1	1074783	BRACKET, SOLENOID MOUNTING	
4	2	1072377	RD HD MACH SCREW, (8-32 X1.25)	
5	2	1071646	NUT, HEX, 8-32	
6	3	1071939	PLASTIC , GRIPPER NUT	
7	3	1078769	90° ELBOW, 1/8"NPTX1/4T,PLS	520-524
7	3	1078770	90° ELBOW, 1/4"NPTX1/4T,PLS	526
8	N/A	1071936	TUBING, POLY 1/4" O.D. X .035	
9	2	3003551	SCREW, 10-32 X 1 1/2" SS	

REVISIONS					
ZONE	ECN	REV.	DESCRIPTION	DATE	APP'D
			SEE SHEET 1 FOR LIST OF CHANGES		

NOTE:  
1. LENGTH OF TUBING VARIES WITH EACH SIZE OF DIAPHRAGM VALVE.  
2. DIAPHRAGM VALVE IS NORMALLY OPEN, PRESSURE TO CLOSE.  
3. BOSS NO. 1 AND NO. 4 ON VALVE TAPPED 1/8" N.P.T. (520,521, 524) 1/4" N.P.T.(526)



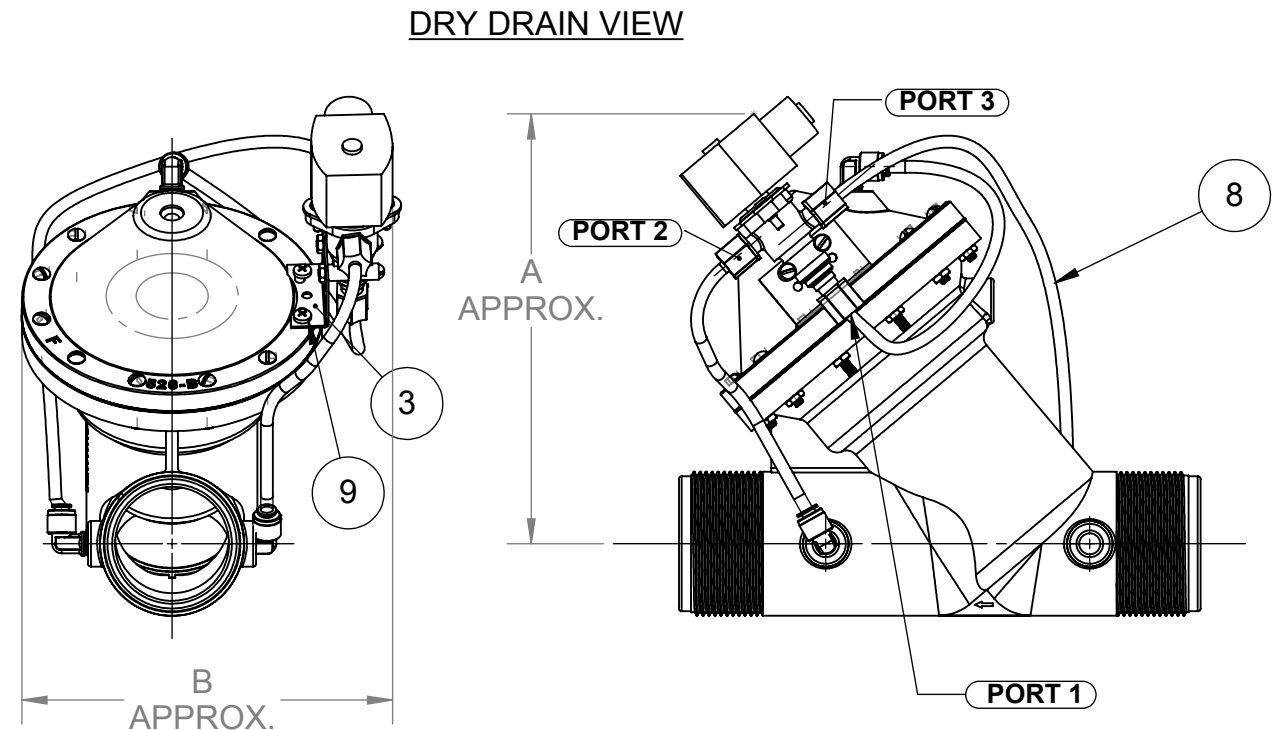
**SOLENOID ENERGIZED.**  
UPSTREAM PRESSURE, FROM SOLENOID PORT 2 TO PORT 1, IS APPLIED TO UPPER DIAPHRAGM CHAMBER TO CLOSE THE DIAPHRAGM VALVE.

**SOLENOID DE-ENERGIZED.**  
PRESSURE FROM UPPER DIAPHRAGM CHAMBER IS VENTED, THROUGH SOLENOID PORT 1 TO PORT 3 TO DRAIN. UPSTREAM PRESSURE OPENS THE DIAPHRAGM VALVE.

VALVE SERIES	PIPE SIZE	A	B
520	3/8", 1/2"	5.87	4.12
		149.1	104.6
521	3/4", 1"	6.52	5.12
		165.6	130.0
524	1-1/2", 2"	7.62	6.25
		193.5	158.75
526	2-1/2", 3"	9.62	7.87
		244.3	200.0

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TOLERANCES:  
ANGLES: ± 1°  
1 PLACE .X:  
2 PLACE .XX:  
3 PLACE .XXX:



**SOLENOID DE-ENERGIZED.**  
UPSTREAM PRESSURE, FROM SOLENOID PORT 3 TO PORT 1, IS APPLIED TO UPPER DIAPHRAGM CHAMBER TO CLOSE THE DIAPHRAGM VALVE.

**SOLENOID ENERGIZED.**  
PRESSURE FROM UPPER DIAPHRAGM CHAMBER IS VENTED, THROUGH SOLENOID PORT 1 TO PORT 2 TO DRAIN. UPSTREAM PRESSURE OPENS THE DIAPHRAGM VALVE.

### DRY DRAIN OPTION



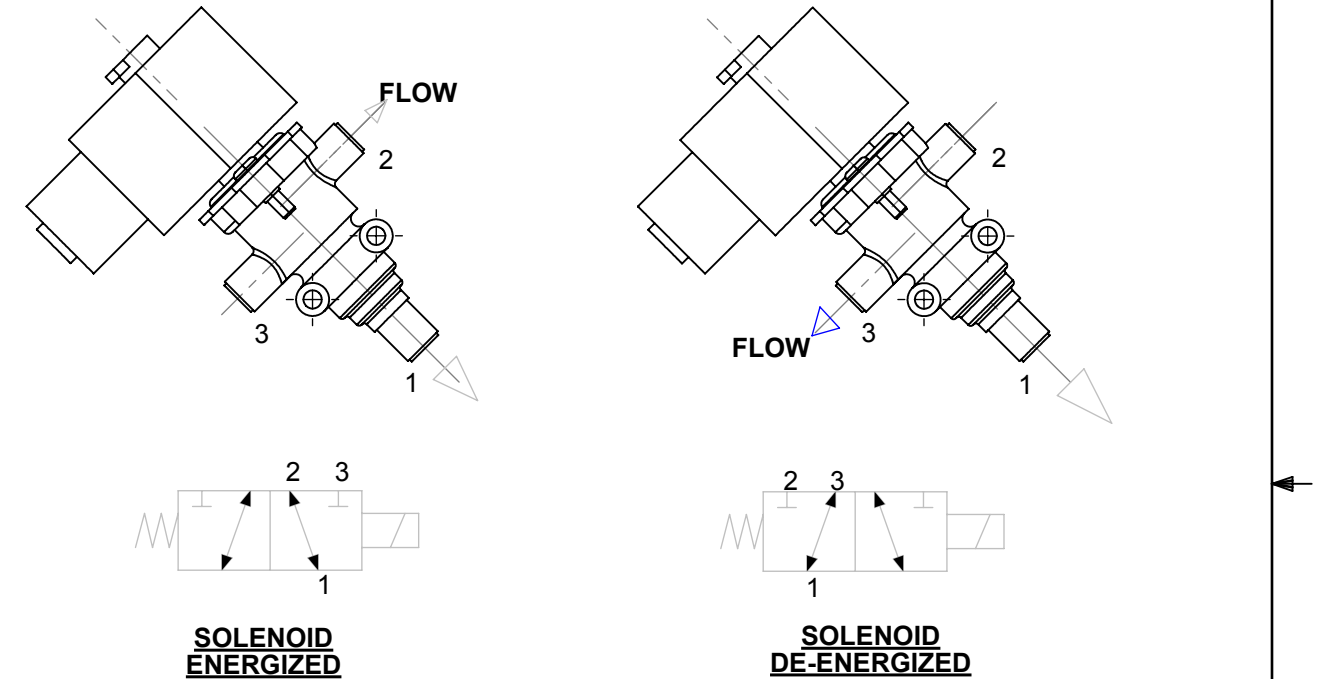
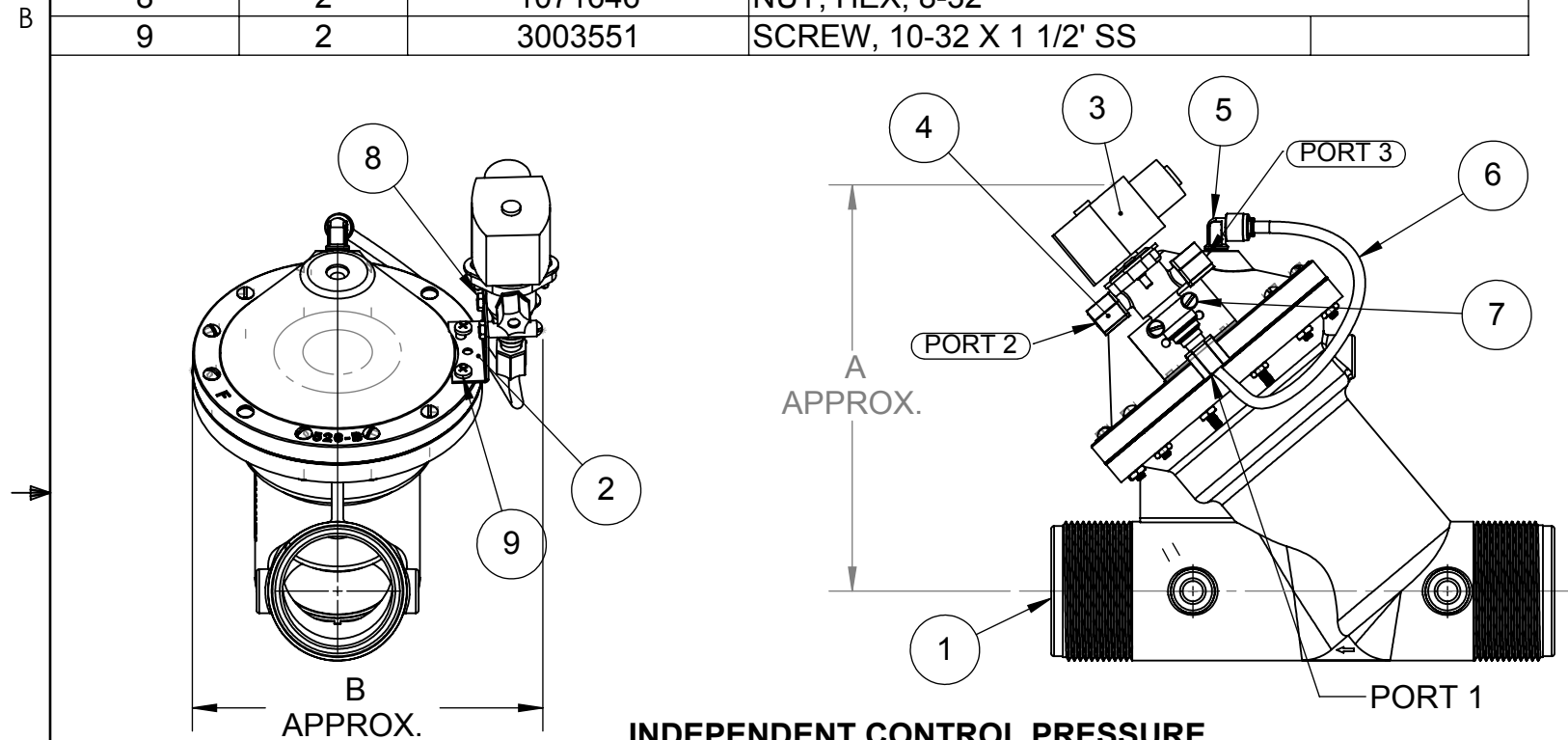
THIRD ANGLE PROJECTION	
APPROVALS	DATE
DRAWN	
APPROVED	
CHECKED	

TITLE		
CATALOG SHEET, K520 - K526 SOLENOID OPERATED VALVES		
SIZE	DWG NO.	REV
B	1081312	D
SCALE	SHEET 2 OF 3	
1:4		

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION	
1	1	-	DIAPHRAGM VALVE-NORM OPEN	
2	1	1074783	BRACKET, SOLENOID MOUNTING	
3	1	1075637	SOLENOID, ASCO NO. 8360G071	
		1075638		110V 60HZ
		1075639		220V 50HZ 24V 60 HZ
4	3	1071939	PLASTIC , GRIPPER NUT	
5	1	1078769	TUBING, ELBOW, 1/8"NPTX1/4T,PLS 520-524	
5	1	1078770	TUBING, ELBOW, 1/4"NPTX1/4T,PLS 526	
6	N/A	1071936	TUBING, POLY 1/4" O.D. X .035	
7	2	1072377	RD HD MACH SCREW, (8-32 X1.25)	
8	2	1071646	NUT, HEX, 8-32	
9	2	3003551	SCREW, 10-32 X 1 1/2' SS	

REVISIONS					
ZONE	ECN	REV.	DESCRIPTION	DATE	APP'D
			SEE SHEET 1 FOR LIST OF CHANGES		

NOTE:  
1. LENGTH OF TUBING VARIES WITH EACH SIZE OF DIAPHRAGM VALVE.  
2. DIAPHRAGM VALVE IS NORMALLY OPEN.



**INDEPENDENT CONTROL PRESSURE**

**ENERGIZE TO OPEN**  
APPLY CONTROL PRESSURE AT SOLENOID PORT NO. 3  
(PORT NO. 2 VENTED)

**ENERGIZE TO CLOSE**  
APPLY CONTROL PRESSURE AT SOLENOID PORT NO. 2  
(PORT NO. 3 VENTED)

CONTROL PRESSURE MUST BE EQUAL TO OR GREATER  
THAN LINE PRESSURE.

CURRENT DRAIN (AMPERES)		
VOLTAGE	INRUSH	HOLDING
24V 60Hz	1.66	1.04
120V 60Hz	0.33	0.21
220V 50Hz	0.18	0.11

VALVE SERIES	PIPE SIZE	A	B
520	3/8", 1/2"	5.87 149.1	4.12 104.6
521	3/4", 1"	6.52 165.6	5.12 130.0
524	1-1/2", 2"	7.62 193.5	6.25 158.75
526	2-1/2", 3"	9.62 244.3	7.87 200.00

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TOLERANCES:  
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1 PLACE .X: ±.015  
2 PLACE .XX: ±.010  
3 PLACE .XXX: ±.005

THIRD ANGLE PROJECTION	
APPROVALS	DATE
DRAWN	
APPROVED	
CHECKED	

**AQ-Matic** AQ-Matic

TITLE: CATALOG SHEET, K520 - K526 SOLENOID OPERATED VALVES

SIZE: B DWG NO. 1081312 REV D

SCALE: 1:4 SHEET 3 OF 3