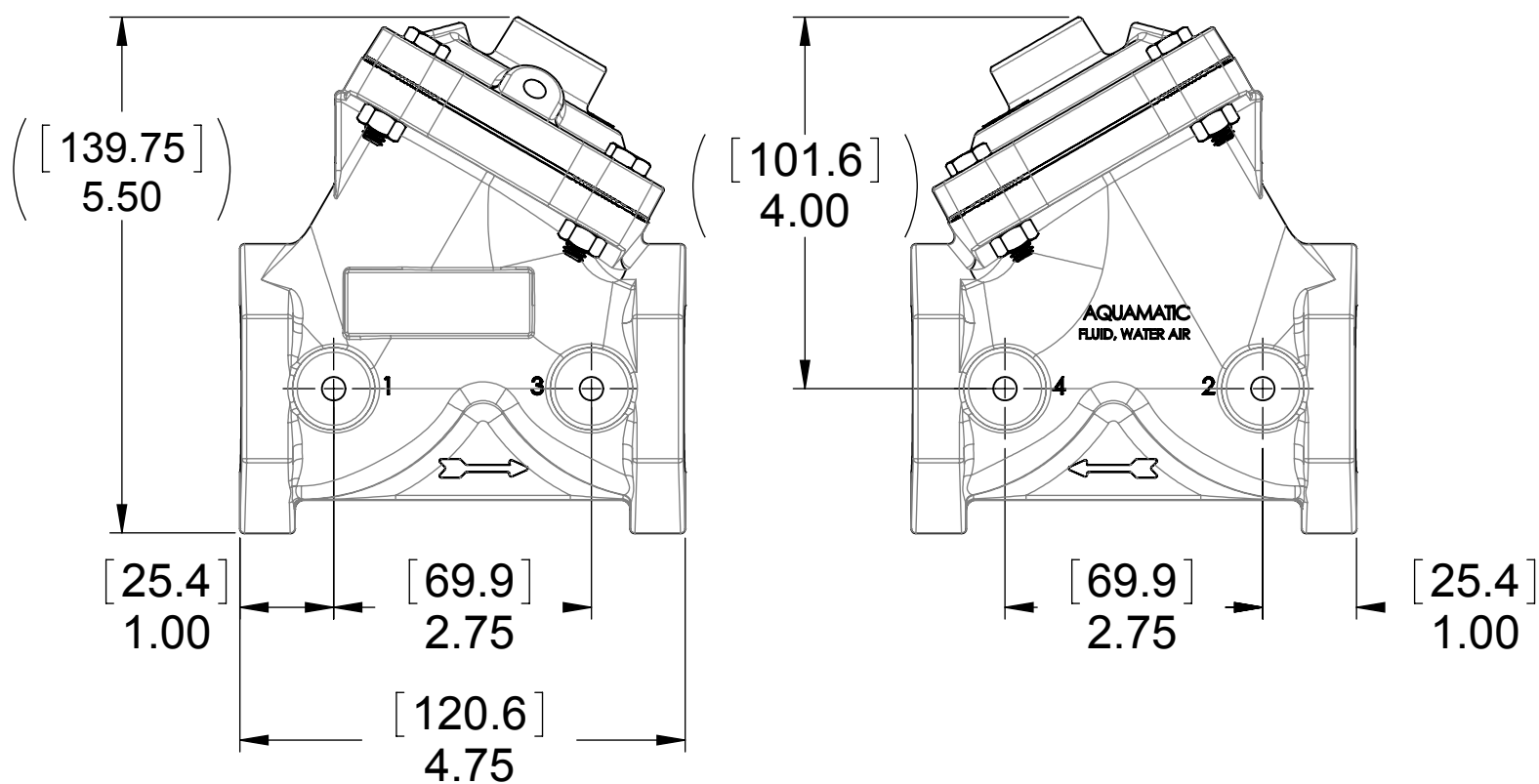


ASSEMBLY TOOLS	
DESCRIPTION	PART NO.
FOR INSTALLATION AND REMOVAL OF SEAT (ITEM #2) (TOOL NOT SHOWN)	1074247 (424-MT)
FOR INSTALLATION AND REMOVAL OF SHAFT GUIDE (ITEM #10) (TOOL NOT SHOWN)	1074227 (424-GT)

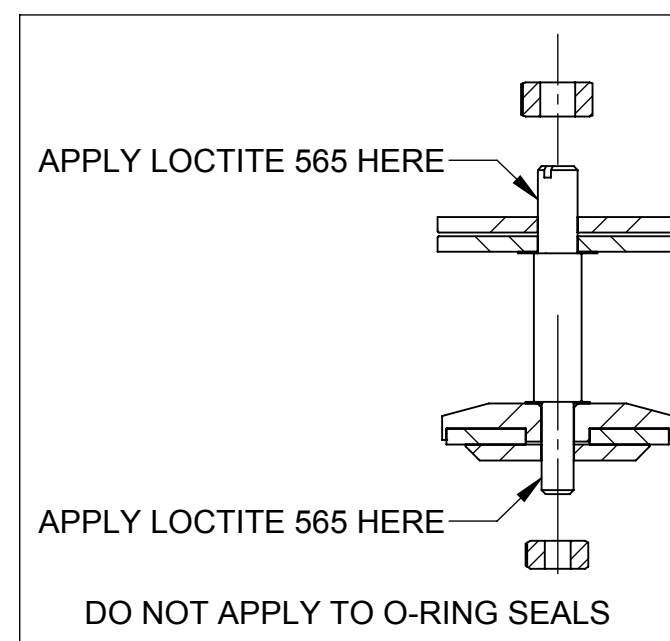
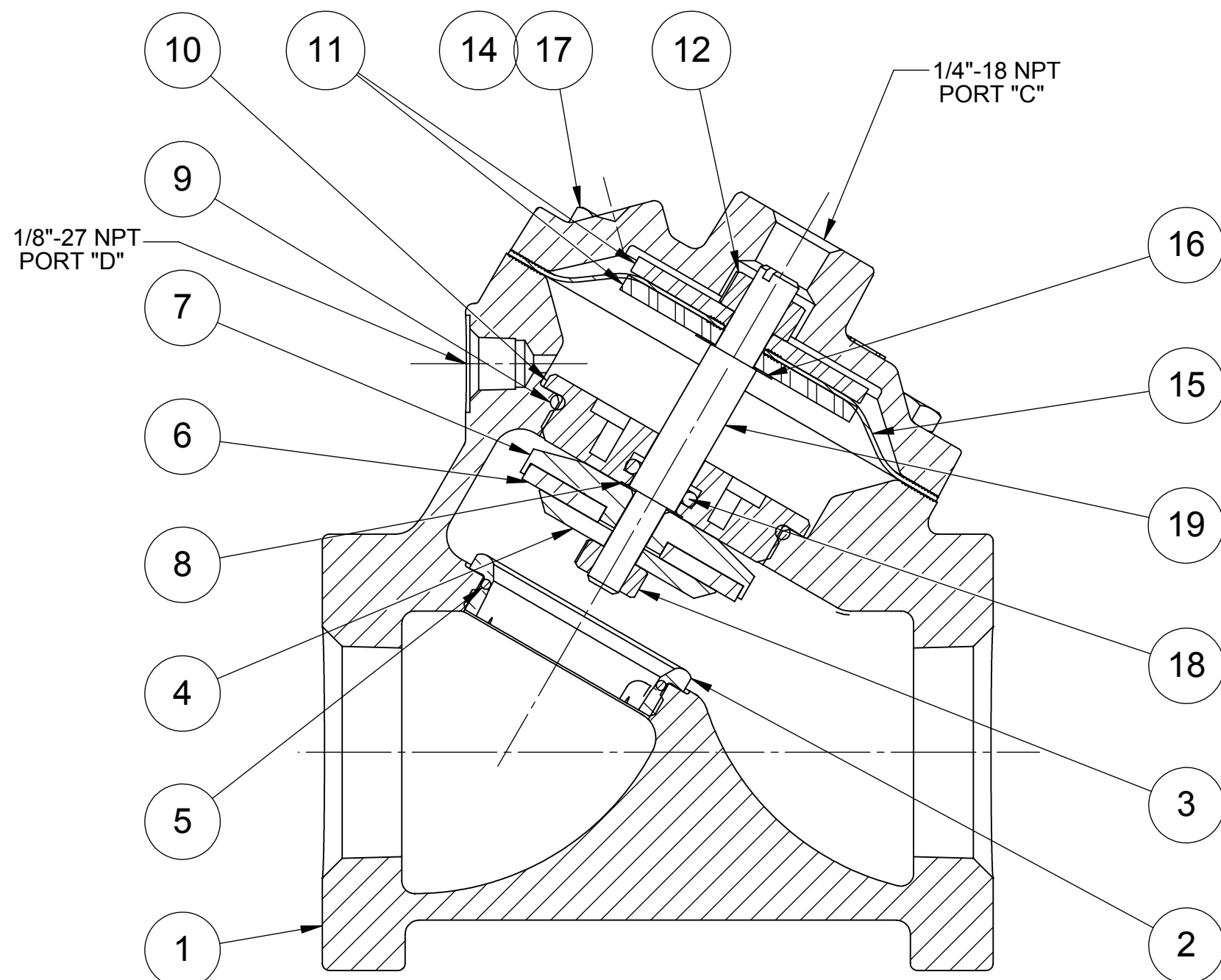
REPAIR PARTS KITS			
DESCRIPTION	PART NO.		
DIAPHRAGM & SEALS KIT CONSISTS OF ITEM NO'S 3,5,6,8,9,12,15,16,18	1070069 (424-RA)	1070082 (424-RAE)	1070094 (424-RAV)
	BUNA N INCLUDES DIAPHRAGM 1074222 (424-FB)	E.P.D.M. INCLUDES DIAPHRAGM 1074222 (424-FB)	FKM INCLUDES DIAPHRAGM 1074224 (424-FV)
	INT. PARTS KIT (NORM. OPEN) CONSISTS OF STANDARD ITEM NO'S 4,7,10,11(2),19		
SEAT (ITEM NO. 2)	1074245 (424-MO)		

REVISIONS					
ZONE	ECN	REV.	DESCRIPTION	DATE	APP'D
	102411	M	ITEM#10-1074225 (424-GGO) WAS 1074122 (421-GGO)	9/6/13	ANH
	103541	N	ITEM#4-WAS:1074237,ITEM#10-WAS:1074225,ITEM#11-WAS:1074220 ITEM#33-WAS:43033	23NOV14	TJM
	104233	P	ITEM 7 WAS 107229, UPDATED TITLE BLOCK, REMOVED NOTE 3	2/4/15	ANH
	104479	R	1- ITEM #11 WAS: 1074221	07APR15	TJM
	104665	T	1-ADD'D: TORQUE TABLES	01JUN15	TJM



TORQUE TABLE		
ITEM #	DESCRIPTION	TORQUED TO (+/- 10%)
2	SEAT	120 IN/LBS
3	LOWER NUT	90 IN/LBS
10	SHAFT GUIDE	120 IN/LBS
12	UPPER NUT	90 IN/LBS
14 & 17	NUT & CAP SCREW	90 IN/LBS

NO.	DESCRIPTION	STD	PART NO.	QTY.	
1	BODY	CAST IRON	1-1/4" NPT	1074196 (424-A5)	1
			1-1/2" NPT	1074199 (424-A6)	
		CAST BRASS	1-1/4" NPT	1074190 (424-AB5)	
			1-1/2" NPT	1074193 (424-AB6)	
2	SEAT - BRASS (REQ'S ASSY TOOL)	*	1074245 (424-MO)	1	
3	HEX NUT (1/4-28)	*	1263852	1	
4	DISC PLATE - SS	*	1074238	1	
5	O-RING	BUNA N	1071678 (ORB-028)	1	
		E.P.D.M.	15243		
		FKM	1071793 (ORV-028)		
6	DISC	BUNA	1074232 (424-J)	1	
		E.P.D.M.	1074233 (424-JE)		
		FKM	1074236 (424-JV)		
		HYCAR	1074234 (424-JH)		
7	DISC HOLDER - SS	*	1074231 (424-H)	1	
8	GASKET - COPPER	*	1073948 (200-GG)	1	
9	O-RING	BUNA N	1071695 (ORB-132)	1	
		E.P.D.M.	1071734 (ORE-132)		
		FKM	1071806 (ORV-132)		
10	SHAFT GUIDE - SS (REQ'S ASSY TOOL)	*	1074226	1	
11	DIAPHRAGM PLATE - SS	*	43943	2	
12	HEX NUT (5/16-24)	PLATED STEEL	1263853	1	
13	CAP	CAST IRON	1074202 (424-C)	1	
		CAST BRASS	1074206 (424-CB)		
14	HEX SCREW	PLATED STEEL	1072399 (SCZ-0007)	4	
15	DIAPHRAGM	BUNA N	1074222 (424-FB)	1	
		FKM	1074224 (424-FV)		
16	GASKET - COPPER	COPPER	1074252 (424-R)	1	
17	HEX NUT	PLATED STEEL	1071656 (NUZ-0008)	4	
18	O-RING	BUNA N	1071689 (ORB-110TC)	1	
		E.P.D.M.	1071726 (ORE-110TC)		
		FKM	1239021 (ORV-110)		
19	SHAFT (NORMALLY OPEN)	*	1074239 (424-L)	1	

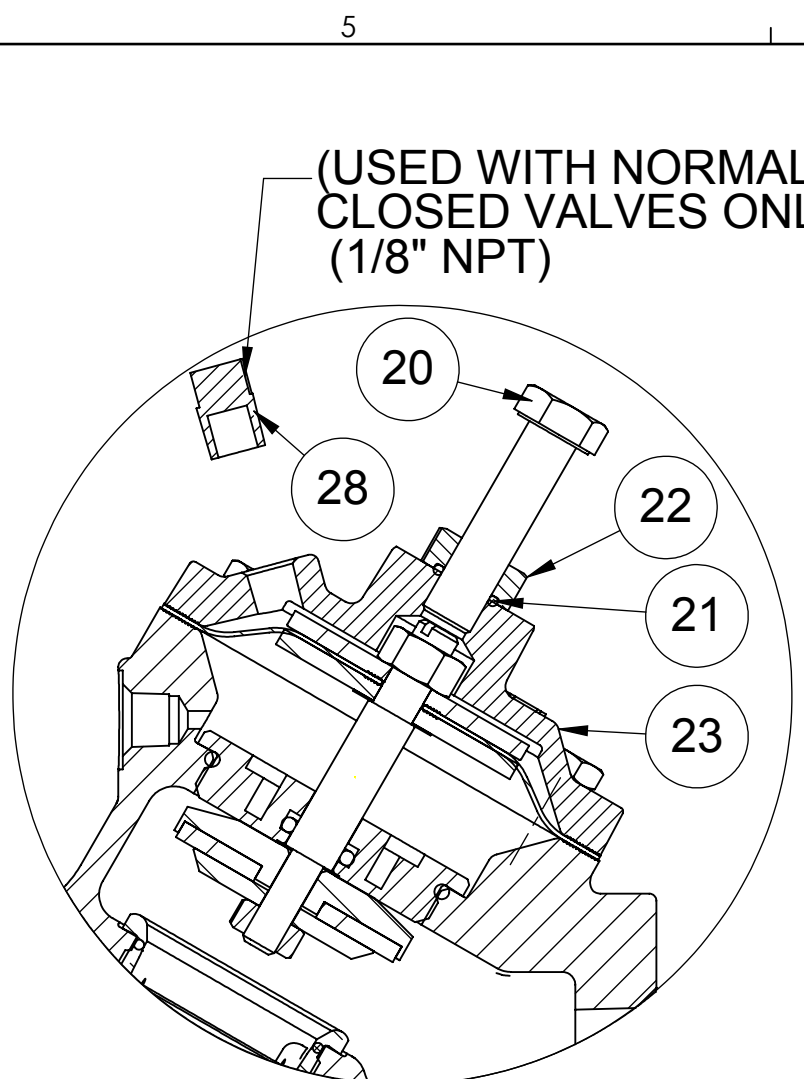


1070023 (V42D-0000-00000) (1-1/4" NPT)  
 1070025 (V42E-0000-00000) (1-1/2" NPT)  
**NORMALLY OPEN (STANDARD)**

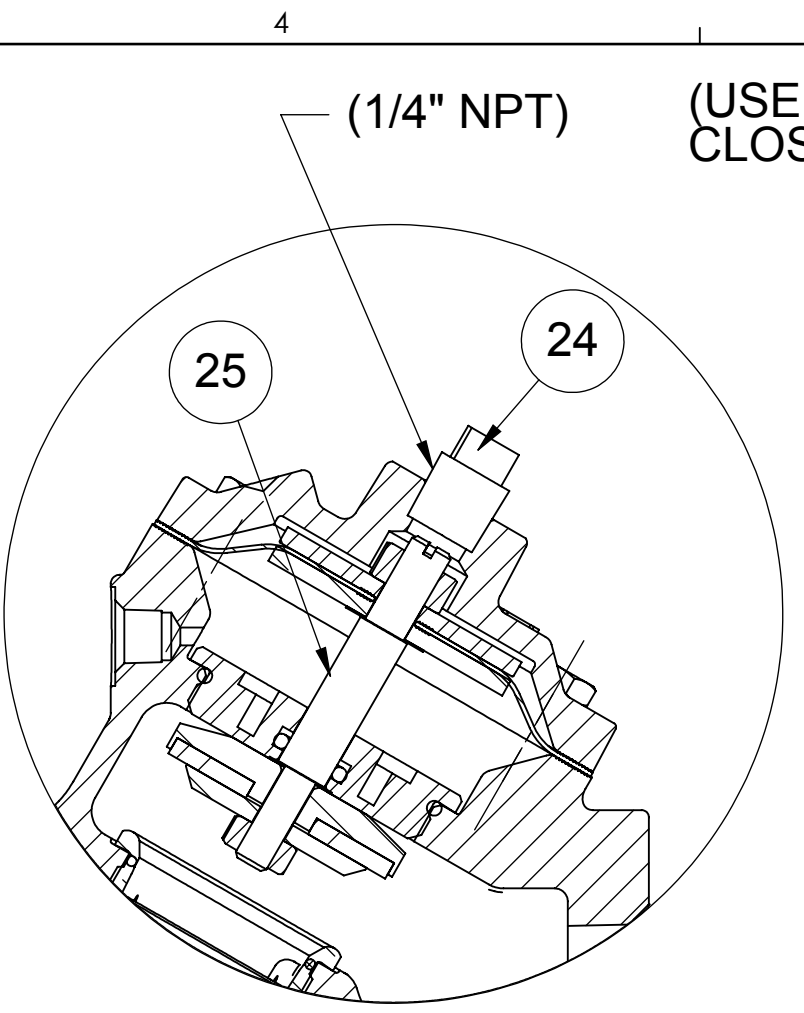
NOTES:  
 1. AMERICAN NATIONAL STANDARD TAPER PIPE THREADS (NPT) PER ANSI B2.1-1968  
 2. VALVES AVAILABLE WITH B.S.P.T. END CONNECTIONS.

**SEE REVERSE SIDE FOR CONFIGURATION OPTIONS**

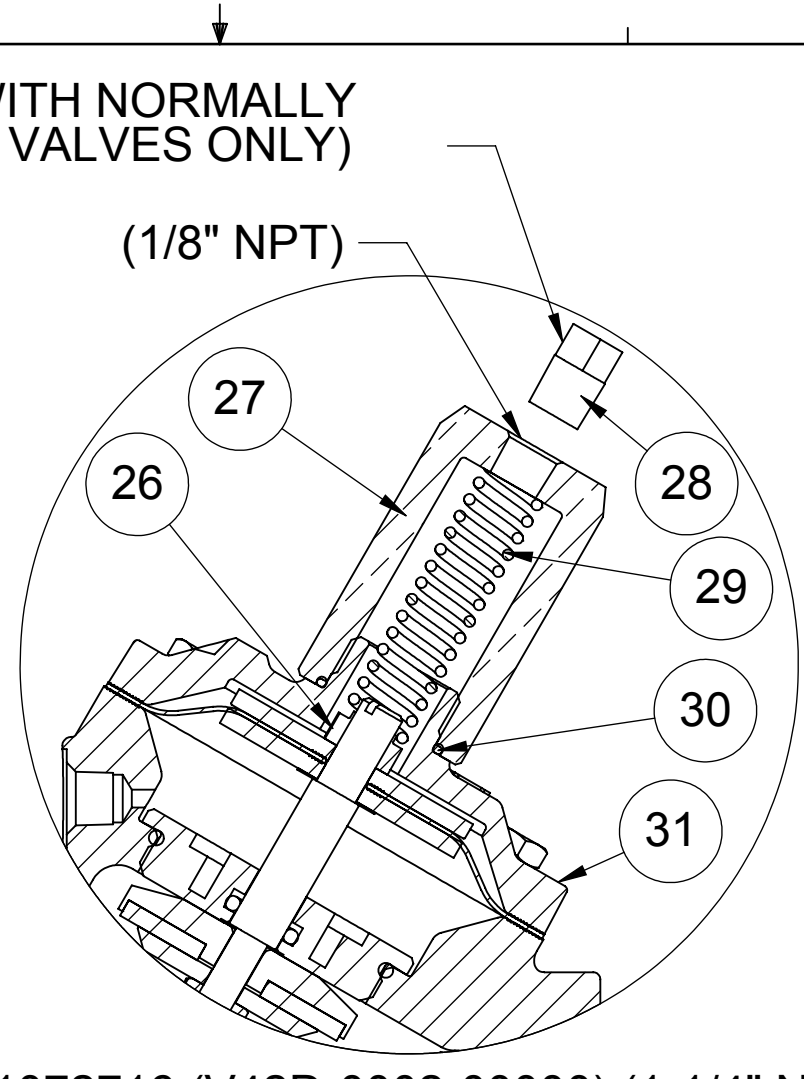
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THIRD ANGLE PROJECTION	APPROVALS	DATE	TITLE <b>CATALOG SHEET, 424          DIAPHRAGM VALVE STANDARD MODEL</b>
DRAWN TJM	APPROVED	12DEC12	SIZE <b>B</b>
CHECKED	DWG NO. <b>BR1077614</b>	REV <b>U</b>	SCALE 1:1
DO NOT SCALE DRAWING. DIMS. ARE IN INCHES [mm] INTERPRET DIMS AND TOLERANCES PER ASME Y14.5M-2009 UNLESS OTHERWISE SPECIFIED. ALL FINISHED MACHINED SURFACES 12 $\frac{5}{8}$ OR BETTER. TOLERANCES: ANGLES: $\pm 1^\circ$ 1 PLACE .X: $\pm .015$ [0.38] 2 PLACE .XX: $\pm .01$ [0.3] 3 PLACE .XXX: $\pm .005$ [0.13]		SHEET 1 OF 2	



1072720 (V42D-0010-00000) (1-1/4" NPT)  
 1070028 (V42E-0010-00000) (1-1/2" NPT)  
**LIMIT STOP**

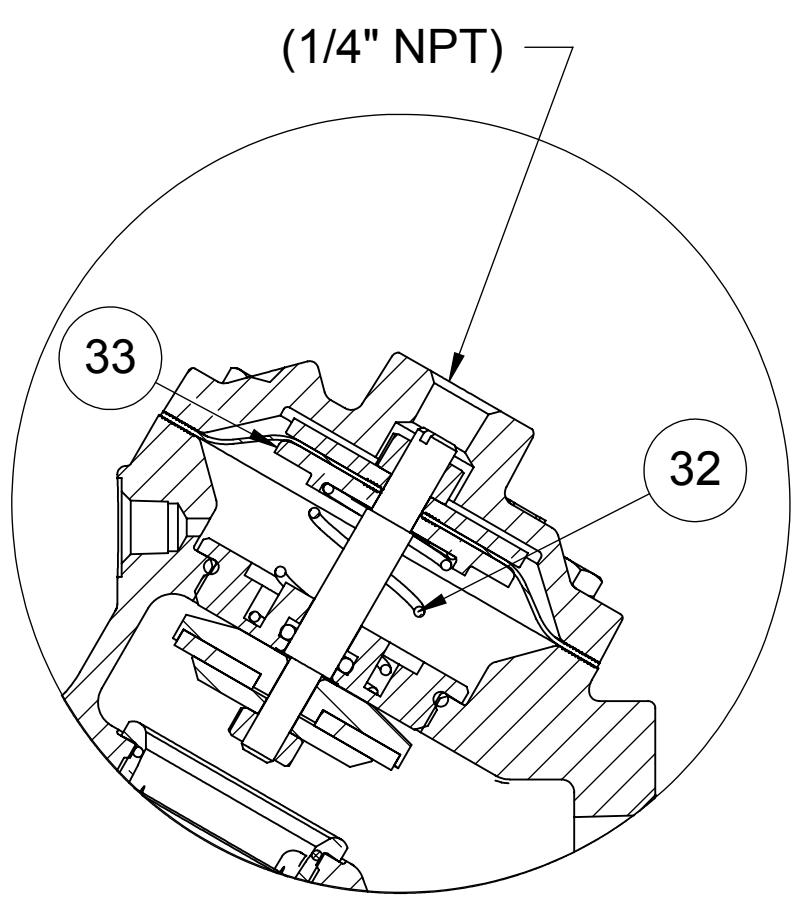


1072723 (V42D-0030-00000) (1-1/4" NPT)  
 1070026 (V42E-0030-00000) (1-1/2" NPT)  
**NORMALLY CLOSED**

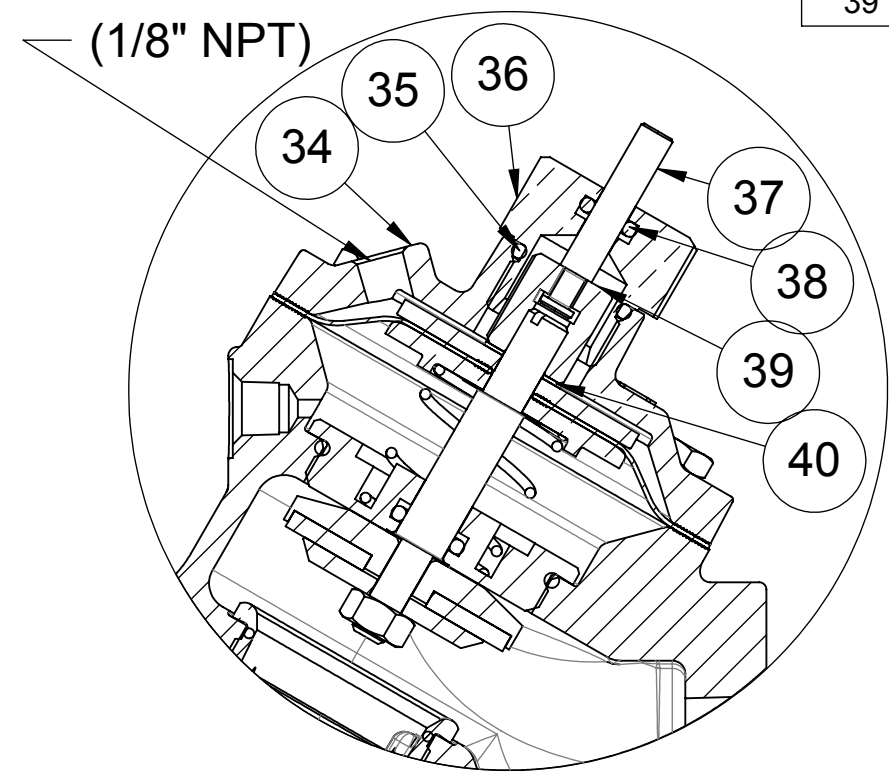


1072716 (V42D-0002-00000) (1-1/4" NPT)  
 1072792 (V42E-0002-00000) (1-1/2" NPT)  
**SPRING ASSIST CLOSED**

TORQUE TABLE		
ITEM #	DESCRIPTION	TORQUED TO (+/- 10%)
22	NUT, STOP	90 IN/LBS
26	CENTERING NUT	90 IN/LBS
27	RETAINER NUT	120 IN/LBS
36	SHAFT GUIDE BUSHING	120 IN/LBS
39	TOP NUT	90 IN/LBS



1072715 (V42D-0001-00000) (1-1/4" NPT)  
 1070027 (V42E-0001-00000) (1-1/2" NPT)  
**SPRING ASSIST OPEN**



1072722 (V42D-0021-00000) (1-1/4" NPT)  
 1072804 (V42E-0021-00000) (1-1/2" NPT)  
**POSITION INDICATOR**

CONVERSION KITS	
DESCRIPTION	PART NO.
CONVERSION KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 20,21,22,23	1074243 (424-LSC)
CONVERSION KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 26 THRU 31	1074266 (424-SCC)
CONVERSION KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 10,16,32,33	1074269 (424-SOC)
CONVERSION KIT (POSITION INDICATOR) CONSISTS OF STANDARD ITEM NO'S 34 THRU 40	1074250 (424-PIC)

REPAIR PARTS KITS	
DESCRIPTION	PART NO.
INT. PARTS KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 20,21,22	1074242 (424-LS)
INT. PARTS KIT (NORM. CLOSED) CONSISTS OF STANDARD ITEM NO'S 4,7,10,11(2),25	1070130 (424-RG)
INT. PARTS KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 26,29,30	1074265 (424-SC)
INT. PARTS KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 16,32,33	1074268 (424-SO)
INT. PARTS KIT (POSITION INDICATOR) CONSISTS OF STANDARD ITEM NO'S 35 THRU 40	1074249 (424-PI)

REVISIONS					
ZONE	ECN	REV.	DESCRIPTION	DATE	APP'D
	1001	U	AQ Matic update & verified part numbers	17JAN17	MGS

NO	DESCRIPTION	STD	PART NO.	QTY.
<b>LIMIT STOP MODEL</b>				
20	SCREW	*	1072362 (SCS-0031)	1
21	O-RING	*	1071668 (ORB-012)	1
22	NUT, STOP, 3/8-24	*	1077534 (400-H)	1
23	CAP	CAST IRON	1074210 (424-CCC)	1
		CAST BRASS	1074213 (424-CCCB)	
<b>NORMALLY CLOSED MODEL</b>				
24	PIPE PLUG (1/4" NPT)	PLATED STEEL	1071918 (PLZ-0008)	1
		BRASS	1071904 (PLB-0009)	
25	SHAFT (NORMALLY CLOSED)	*	1074241 (424-LL)	1
<b>SPRING ASSIST CLOSED MODEL</b>				
26	CENTERING NUT	*	1074276 (424-X)	1
27	RETAINER NUT - BRASS	*	1074274 (424-TT)	1
28	PIPE PLUG (1/8" NPT)	PLATED STEEL	1071917 (PLZ-0005)	1
		BRASS	1071903 (PLB-0007)	
29	SPRING	*	1074270 (424-SS)	1
30	O-RING	*	1071674 (ORB-020)	1
31	CAP	CAST IRON	1074208 (424-CC)	1
		CAST BRASS	1074209 (424-CCB)	
<b>SPRING ASSIST OPEN MODEL</b>				
32	SPRING	*	1236766	1
33	DIAPHRAGM PLATE, 424	*	43728	1
<b>POSITION INDICATOR MODEL</b>				
34	CAP	CAST IRON	1074217 (424-CF)	1
		CAST BRASS	1074218 (424-CFB)	
35	O-RING	*	1071692 (ORB-116)	1
36	SHAFT GUIDE BUSHING	*	1074121 (421-GF)	1
37	INDICATOR SHAFT	*	1074251 (424-PM)	1
38	O-RING	*	1071688 (ORB-108TC)	1
39	TOP NUT	*	1074272 (424-TB)	1
40	LOCKWASHER	*	1073590 (WAS-0007)	1

- NOTES:**
- SPRING ASSIST CLOSED MODEL CANNOT BE COMBINED WITH LIMIT STOP MODEL.
  - VALVES AVAILABLE WITH B.S.P.T END CONNECTIONS.

SEE REVERSE SIDE FOR STANDARD NORMALLY OPEN MODEL

COMPONENTS / ASSEMBLIES TO BE COMPLIANT AND COMPATIBLE WITH EUROPEAN UNION DIRECTIVE 2011/65/EEC (RoHS2) & REGULATION (EC)1907/2006 (REACH) REQUIREMENTS

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TOLERANCES:  
 ANGLES: ± 1°  
 1 PLACE .X: ± .015 [0.38]  
 2 PLACE .XX: ± .01 [0.3]  
 3 PLACE .XXX: ± .005 [0.13]

THIRD ANGLE PROJECTION

APPROVALS: APPROVED, CHECKED, DRAWN: TJM, DATE: 12DEC12

**AQ Matic** Valve & Controls Company Inc.

TITLE: CATALOG SHEET, 424  
 DIAPHRAGM VALVE STANDARD MODEL

SIZE: B DWG NO.: BR1077614 REV: U

SCALE: 1:1 SHEET 2 OF 2