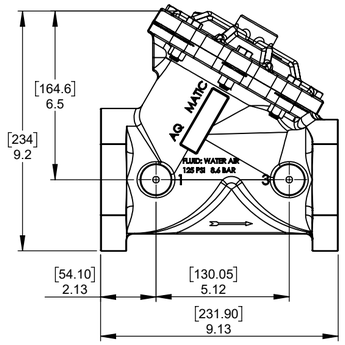
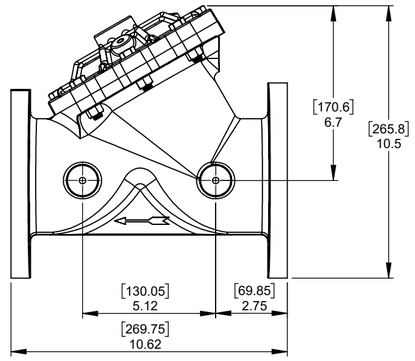
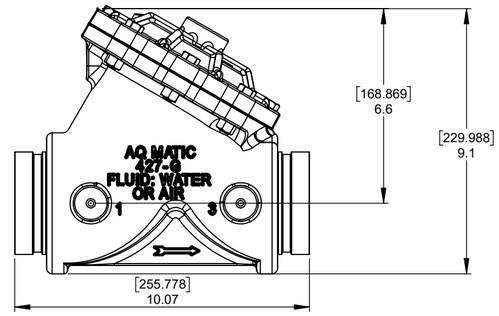


1070043 (V42J-0000-00000)
3" NPT ENDS



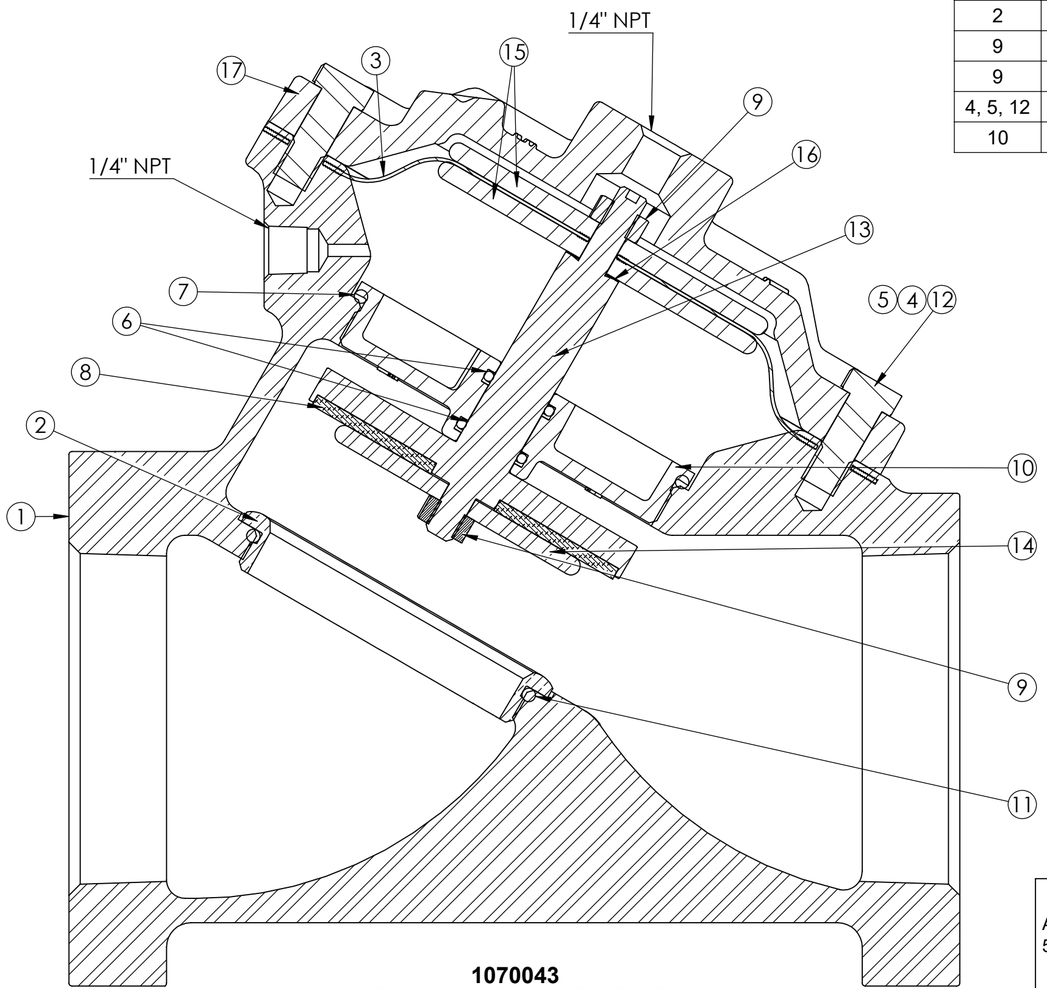
1070044 (V42J-3000-00000)
FLANGED ENDS



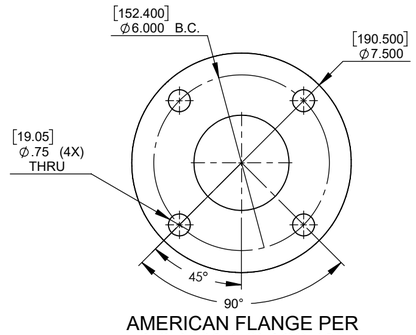
4510487 (V42J-5000-00000)
GROOVED CLAMP DESIGN

AWWA C606-15 IPS CUT GROOVE DESIGN

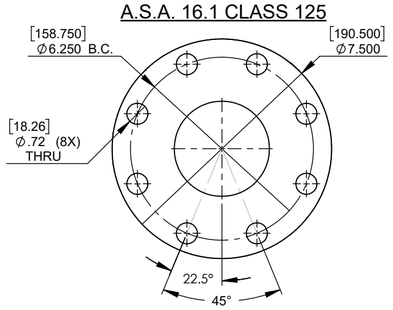
TORQUE TABLE		
ITEM#	**DESCRIPTION**	**TORQUED TO (+/-10%)**
2	SEAT	500 IN/LBS (41.6 FT/LBS)
9	UPPER NUT	140 IN/LBS
9	LOWER NUT	140 IN/LBS
4, 5, 12	NUT,HEX SCREW	140 IN/LBS
10	SHAFT GUIDE	500 IN/LBS (41.6 FT/LBS)



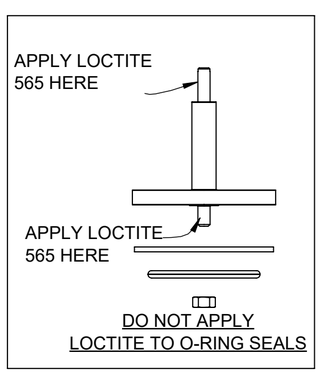
1070043
NORMALLY OPEN (STANDARD)



AMERICAN FLANGE PER
A.S.A. 16.1 CLASS 125



METRIC FLANGE PER
BS4504. DIN 10 & ISO R 2084



REPAIR PARTS KITS			
DESCRIPTION	PART NO.		
DIAPHRAGM & SEALS KIT CONSISTS OF ITEM NO'S 3, 6(2), 7, 8, 9(2), 11, 16,	1070072 (427-RA) BUNA N INCLUDES DIAPHRAGM 1074475 (427-FB)	1070085 (427-RAE) E.P.D.M. INCLUDES DIAPHRAGM 1074475 (427-FB)	1070097 (427-RAV) FKM INCLUDES DIAPHAGM 1074477 (427-FV)
INT. PARTS KIT (NORM. OPEN) CONSISTS OF STANDARD ITEM NO'S 10, 13, 14, 15(2)	1070122 (427-RF)		
SEAT (ITEM NO. 2)	1074505 (427-MO)		

ASSEMBLY TOOLS	
DESCRIPTION	PART NO.
FOR INSTALLATION & REMOVAL OF SHAFT GUIDE (ITEM #10)	1-1/8" HEX SOCKET

REVISIONS				
ECN	REV.	DESCRIPTION	DATE	APP'D
1595	T	CATALOG SHEET UPDATE, PARTS CHANGES	1/14/21	
2072	U	CATALOG SHEET UPDATE, PARTS CHANGES	5/18/22	
2125	V	CATALOG SHEET UPDATE, PARTS CHANGES	8/16/22	

ITEM NO.	DESCRIPTION		STD	PART NUMBER	QTY
1	BODY, 427,3.00" NPT THREAD	CAST IRON	*	1074446 (427-AS)	1
	BODY, 427, 3.00" BSPT THREAD	CAST IRON		1074437	
	BODY, 427, FLGD, ISO	CAST IRON		1074439	
	BODY, 427, FLGD ASTM	CAST IRON		1074438	
	BODY, 427, 3.00" NPT THREAD	BRASS		1074449 (427-ASB)	
	BODY, 427, 3.00" BSPT THREAD	BRASS		1074450	
	BODY, 427, 3.00" GROOVED CLAMP	CAST IRON		4510487	
2	SEAT, 427, MACHINED	BRASS	*	1074505 (427-MO)	1
3	DIAPHRAGM SERIES 427	BUNA	*	1074475 (427-FB)	1
		FKM		1074477 (427-FV)	
4	SCREW, 3/8" X 16 X 1 1/2", HX HD	PLTD STL	*	1072405 (SC2-0025)	6
		SS		1072390	
5	HEX NUT, 3/8" - 16	PLTD STL	*	1071658 (NUZ-0014)	6
		SS		1071652	
6	O-RING 2-114	BUNA	*	1071691 (ORB-114TC)	2
		E.P.D.M.		1071729 (ORE-114TC)	
		FKM		1242391 (ORV-114)	
7	O-RING 2-237	BUNA	*	1071708 (ORB-237)	1
		E.P.D.M		1071755 (ORE-237)	
		FKM		1071828 (ORV-237)	
8	DISK, 427	BUNA	*	1074487 (427-J)	1
		E.P.D.M		1074489 (427-JE)	
		FKM		1074492	
		HYCAR		1074490 (427-HO)	
9	NUT, HEX. 5/16" - 24	SS	*	1263853 (RMET)	2
10	SHAFT GUIDE, MACHINED	SS	*	43850	1
11	O-RING, 2-233	E.P.D.M	*	1071754 (ORE-233)	1
		BUNA		1071706 (ORB-233)	
		FKM		1071826 (ORV-233)	
12	SCREW,HEX HD, 3/8"-16X1	SS	*	19768	2
13	SHAFT NORMALLY OPEN	SS	*	4510301-01	1
14	DISC PLATE	SS	*	1074371 (426-DA)	1
15	DIAPHRAGM PLATE	SS	*	1074472 (427-DA)	2
16	COPPER WASHER	COPPER	*	1074252 (424-R)	1
17	CAP, 427, MACHINED	CAST IRON	*	1074454 (427-C)	1
		BRASS		1074457 (427-CB)	

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

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INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M -1994

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES [mm]
CORNER FILLETS R.005-.020 [.127-.508]
TOLERANCES:
ANGLES : ± 1°
1 PLACE .X: ± .100 [2.54]
2 PLACE .XX: ± .010 [0.25]
3 PLACE .XXX: ± .005 [0.13]

THE COMPONENT OR PRODUCT DESCRIBED IN THIS DOCUMENT MUST COMPLY WITH RoHS 3 EU (EUROPEAN UNION) DIRECTIVE 2015/863

THIRD ANGLE PROJECTION

APPROVALS	DATE
DRAWN TRK	5/4/20
CHECKED BY	
APPROVED	

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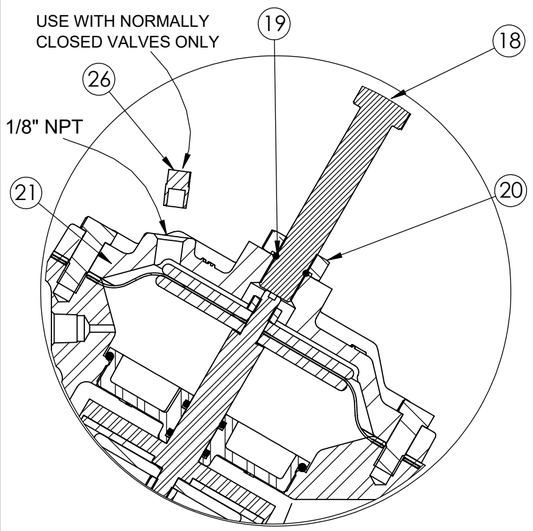
DESCRIPTION
CATALOG SHEET, 427
DIAPHRAGM VALVE STANDARD MODEL

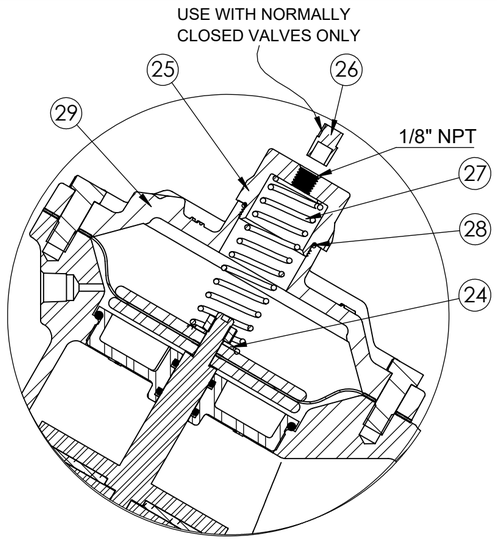
SIZE	DWG NO.	REV.
C	1077617	V

SCALE 1:5 | SOLIDWORKS FORMAT | SHEET 1 OF 2



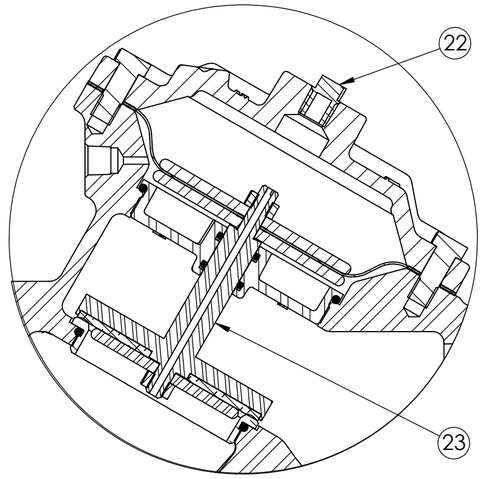
1073052 (V42J-0010-00000) (THREADED)
1073103 (V42J-3010-00000) (FLANGED)

LIMIT STOP



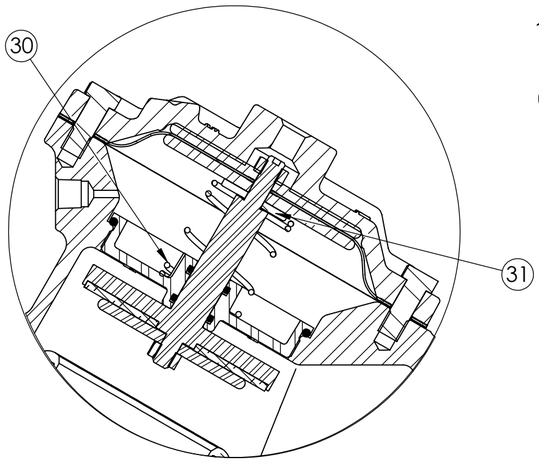
1073047 (V42J-0002-00000) (THREADED)
1073100 (V42J-3002-00000) (FLANGED)

SPRING ASSIST CLOSED



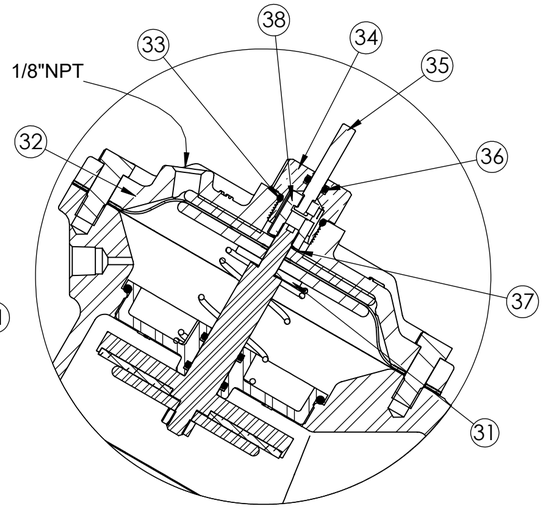
1073055 (V42J-0030-00000) (THREADED)
1073113 (V42J-3030-00000) (FLANGED)

NORMALLY CLOSED



1073045 (V42J-0001-00000) (THREADED)
1073097 (V42J-3001-00000) (FLANGED)

SPRING ASSIST OPEN



1073054 (V42J-0021-00000) (THREADED)
1077374 (V42J-3021-00000) (FLANGED)

POSITION INDICATOR

NOTE:
1. SPRING ASSIST CLOSED MODEL CANNOT BE COMBINED WITH LIMIT STOP OR POSITION INDICATOR MODELS.
2. VALVES AVAILABLE WITH B.S.P. END CONNECTIONS.

REVISIONS

ECN	REV.	DESCRIPTION	DATE	APP'D
		SEE PAGE 1 FOR DOCUMENT CHANGES		

TORQUE TABLE		
ITEM#	DESCRIPTION	TORQUE TO (+/-10%)
20	NUT,LIMIT STOP	120 IN/LBS
25	NUT, RETAINER	140 IN/LBS
34	PI, ROD GUIDE	140 IN/LBS
38	TOP NUT	120 IN/LBS

ITEM NO.	DESCRIPTION	STD	PART NUMBER	QTY.
	LIMIT STOP MODEL			
18	SCREW, 5/8-18X3.50 HEX HD,	*	1072365 (SCS-0043)	1
19	O-RING,2-112,NITRILE	*	1071690 (ORB-112)	1
20	NUT, LIMIT STOP	*	1074434 (426-U)	1
21	CAP, 427, LS, BRASS		1074465 (427-CCCB)	1
	CAP, 427,LS, CAST IRON	*	1074462 (427-CCC)	
	NORMALLY CLOSED MODEL			
22	MALE PIPE PLUG 1/4 NPT, PLATED	*	1071918 (PLZ-0008)	1
	MALE PIPE PLUG 1/4 NPT, BRASS		1071904 (PLB-0009)	
23	COMBINATION SHAFT, 427, N.C.	*	4510301-02	1
	SPRING ASSIST CLOSED MODEL			
24	WASHER,	*	1074083 (421-AH)	1
25	NUT, SPRG RTNR,425 & 465,SS	*	1074433 (426-TTS)	1
26	MALE PIPE PLUG 1/8 NPT, PLATED	*	1071917	1
	MALE PIPE PLUG 1/8 NPT, BRASS		1071903	
27	SPRING,COMPRESSION,316SS	*	1078688 (426-SS)	1
28	O-RING,2-025,NITRILE	*	1071677 (ORB-025)	1
29	CAP, 427, SPRING ASSIST,CI	*	1074460 (427-CC)	1
	CAP, 427,SPRING ASSIST, CB		1074461 (421-CCB)	
	SPRING ASSIST OPEN MODEL			
30	SPRING, COMPRESSION	*	1078692 (426-S)	1
31	CENTERING WASHER, BRASS	*	1074436	1
	POSITION INDICATOR MODEL			
32	CAP, 427,CI,NPT,PI	*	1074468 (427-CF)	1
	CAP, 427, NPT, PI, CB		1074469 (427-CFB)	
33	O-RING,2-116,NITRILE	*	1071692 (ORB-116)	1
34	PI ROD GDE, V42, BRASS	*	1074121 (421-GF)	1
35	SHAFT,427,SS,MACH	*	1074510 (427-GF)	1
36	O-RING,2-106,NITRILE,TFLN CTD	*	1071688 (ORB-108TC)	1
37	LOCKWASHER,5/16",INTRNL TOOTH	*	1073590 (WAS-0007)	1
38	TOP NUT, BRASS	*	1074332 (425-TB)	1

CONVERSION KITS	
DESCRIPTION	PART NO.
CONVERSION KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 18, 19, 20, 21	1074502 (427-LSC)
CONVERSION KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 24 THRU 29	1074519 (427-SCC)
CONVERSION KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 16, 30, 31	1074521 (427-SO)
CONVERSION KIT (POSITION INDICATOR) CONSISTS OF STANDARD ITEM NO'S 32 THRU 38	1074509 (427-PIC)

REPAIR PARTS KITS	
DESCRIPTION	PART NO.
INT. PARTS KIT (LIMIT STOP) CONSIST OF STANDARD ITEM NO'S 18, 19, 20	1074501 (427-LS)
INT. PARTS KIT (NORM. CLOSED) CONSIST OF STANDARD ITEM NO'S, 10, 14, 15(2), 23	1070133 (427-RG)
INT. PARTS KIT (SPRING ASSIST CLOSED) CONSIST OF STANDARD ITEM NO'S 24, 27, 28	1081565 (427-SC)
INT. PARTS KIT (SPRING ASSIST OPEN) CONSIST OF STANDARD ITEM NO'S 16, 30, 31	1074521 (427-SO)
INT. PARTS KIT (POSITION INDICATOR) CONSIST OF STANDARD ITEM NO'S 33 THRU 38	1074508 (427-PI)

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DESCRIPTION: CATALOG SHEET, 427
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SIZE	DWG NO.	REV.
C	1077617	V

SCALE 1:5 | SOLIDWORKS FORMAT | SHEET 2 OF 2