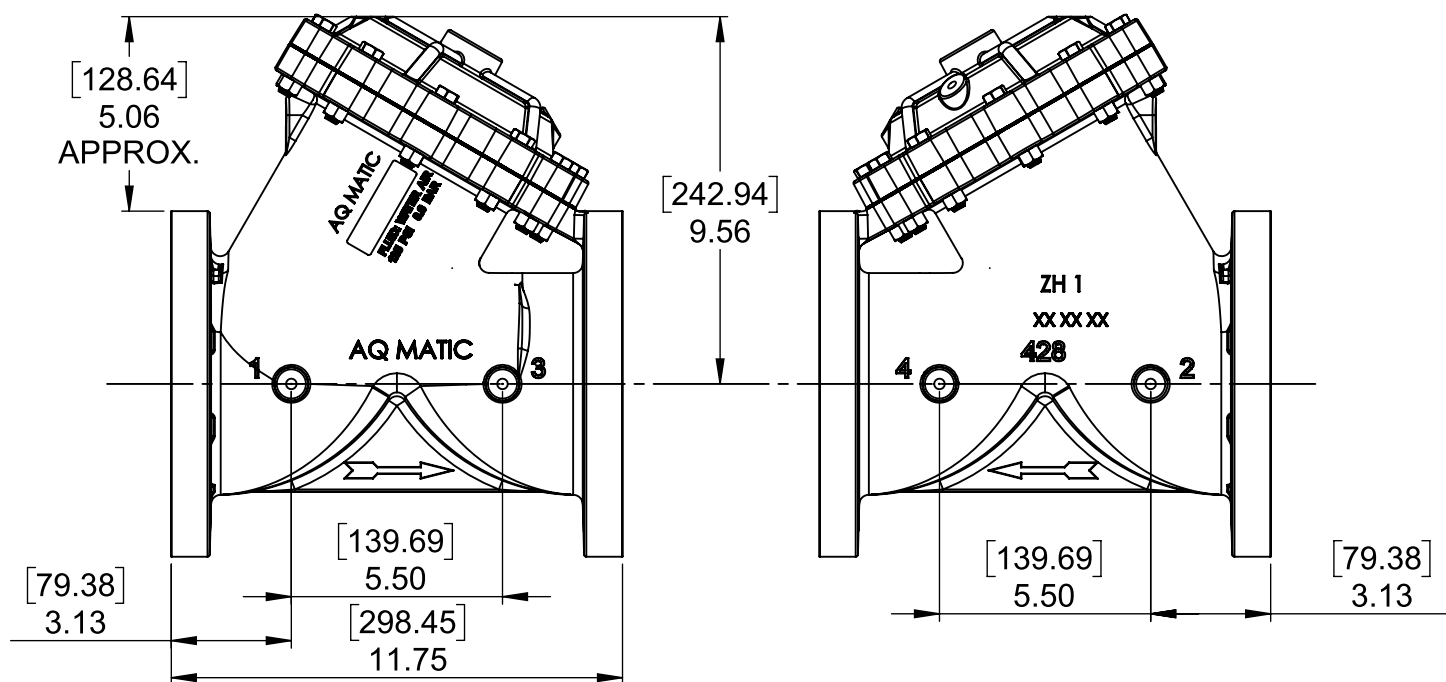
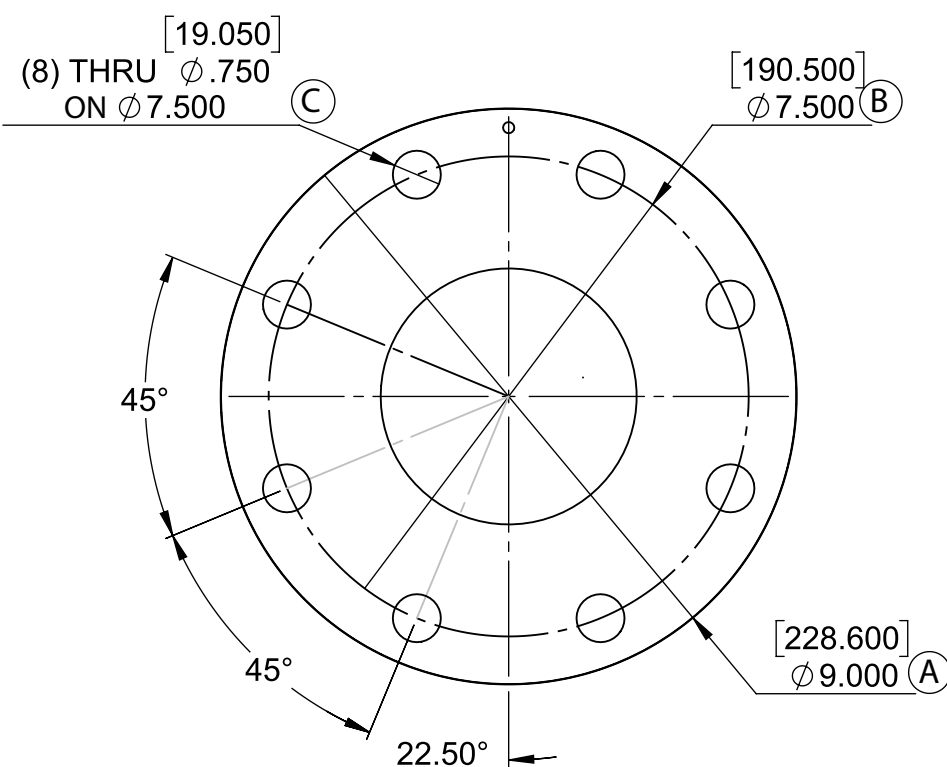


- NOTE:  
 1. AMERICAN NATIONAL STANDARD TAPER PIPE  
 THREADS (NPT) PER ANSI B2.1-1968  
 2. VALVES AVAILABLE WITH B.S.P. END CONNECTIONS.



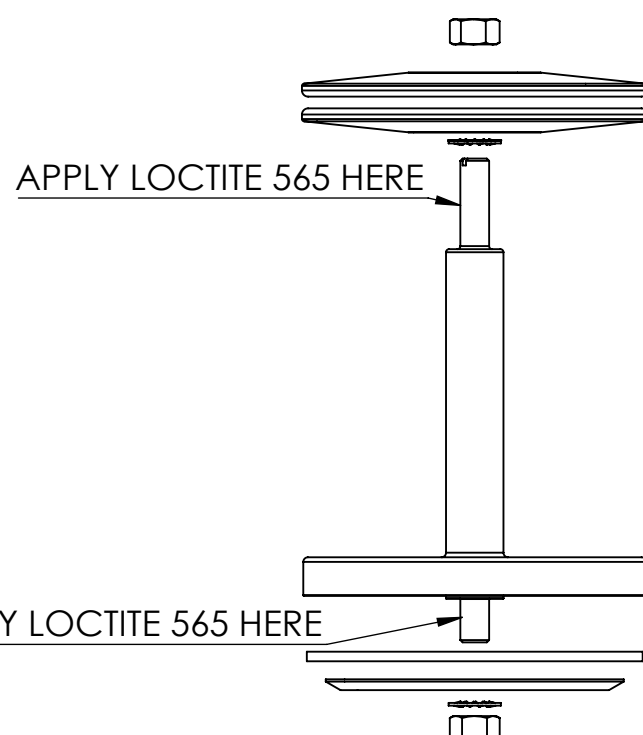
ASSEMBLY TOOLS	
DESCRIPTION	PART NO.
FOR INSTALLATION & REMOVAL OF SHAFT GUIDE (ITEM #7) (NOT SHOWN)	1-1/4" HEX SOCKET

TORQUE TABLE		
ITEM #	DESCRIPTION	TORQUED TO (+/- 10%)
6	UPPER NUT	140 IN/LBS
6	LOWER NUT	215 IN/LBS
7	GUIDE, SHAFT	500 IN/LBS (41.6 FT/LBS)
14	SEAT	400 IN/LBS (33 FT/LBS)
16 & 17	NUT, & CAP SCREW	140 IN/LBS



AMERICAN FLANGE PER ASME/ANSI B16.1 CLASS 125  
 METRIC FLANGE PER BS EN1092-2, ISO 7005-2

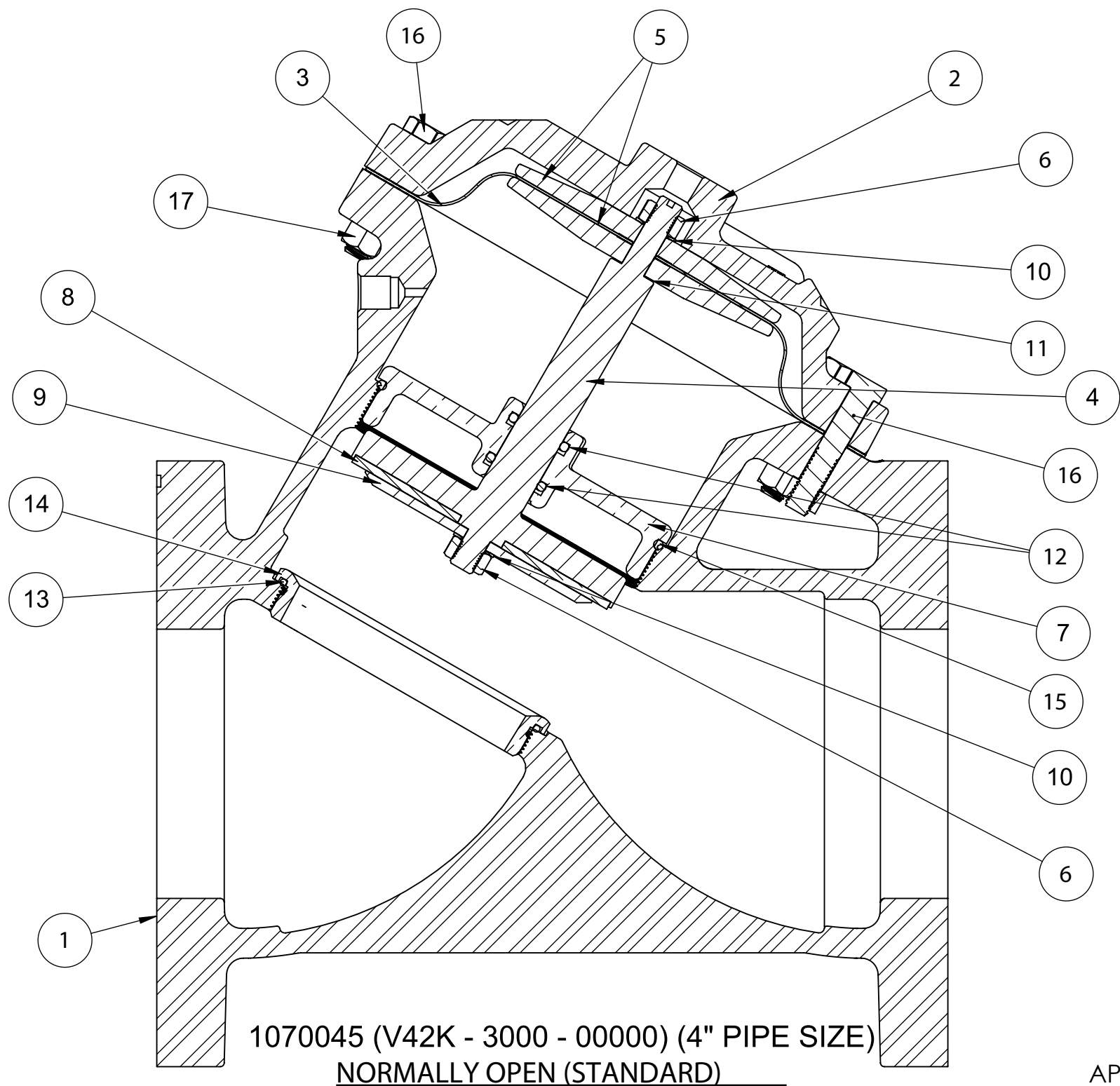
FLANGE STYLE	A	B	C
AMERICAN	9.000	7.500	.750
METRIC	229 MM	180 MM	18 MM



DO NOT APPLY TO O-RING SEALS

REVISIONS				
ECN	REV.	DESCRIPTION	DATE	APP'D
1588	R	REVISED COMPONENTS, UPDATED CATALOG SHEET	1/15/21	
1951	S	CORRECTIONS TO CATALOG SHEET	10/6/21	
2149	T	CORRECTIONS TO CATALOG SHEET	10/6/21	
2271	U	CORRECTIONS TO CATALOG SHEET	9/12/23	

ITEM NO.	DESCRIPTION	STD	PART NUMBER	QTY.
1	CAST BODY 4"	*	1074522 (428-A)	1
	BODY 4.00", ISO FLG		1074523	
2	CAP, 428, NPT	CAST IRON	1074532 (428-C)	1
3	DIAPHRAGM	BUNA N	1074557 (428-FB)	1
		FKM	1074559 (428-FV)	
4	NORMALLY OPEN COMBINATION SHAFT	SS	4510302-01	1
5	DIAPHRAGM PLATES	SS	43759	2
6	HEX NUT (3/8 - 24)	SS	3001990 (NUS-0017)	2
7	SHAFT GUIDE (ASSM. TOOL REQ.)	BRASS	1074563 (428-GO)	1
8	DISC	BUNA	1074568 (428-J)	1
		EPDM	1074570 (428-JE)	
		FKM	1074573 (428-JV)	
		HYCAR	1074571 (428-JH)	
9	DISC PLATE	SS	43734 (428-KA)	1
10	LOCKWASHER, 3/8", INTERNAL	*	1073591 (WAS-0008)	2
11	GASKET, COPPER	*	1073950 (200-LL)	1
12	O-RING 2-210	BUNA N	1071702 (ORA-210TC)	2
		EPDM	1242718 (ORE-210TC)	
		FKM	1242394 (ORV-210TC)	
13	O-RING, 2-156	BUNA N	1071697 (ORA-156)	1
		EPDM	1071739	
		FKM	1071811	
14	SEAT, BRASS (ASSM. TOOL REQ.)	BRASS	1074585 (428-MAO)	1
15	O-RING, 2-245	BUNA N	1071711 (ORA-245)	1
		EPDM	1071759	
		FKM	1071832	
16	HEX SCREW, 3/8"-16	PLATED STEEL	1072406 (SCZ-0027)	11
17	HEX NUT, 3/8" - 16	PLATED STEEL	1071658 (NUZ-0014)	11



REPAIR PARTS KITS			
DESCRIPTION	PART NO.		
DIAPHRAGM & SEALS KIT CONSISTS OF ITEM NO'S 3, 6(2), 8, 10(2), 11, 12(2), 13, 15	1070073 (428-RA)	1070086 (428-RAE)	1070098 (428-RAV)
	BUNA N INCLUDES DIAPHRAGM 1074557 (428-FB)	E.P.D.M. INCLUDES DIAPHRAGM 1074557 (428-FB)	FKM INCLUDES DIAPHRAGM 1074559 (428-FV)
INT. PARTS KIT (NORM. OPEN) CONSISTS OF STANDARD ITEM NO'S 4, 5(2), 7, 9, 10(2)	1070123 (428-RF)		
SEAT (ITEM NO. 14)	1074585 (428-MAO)		

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 INTERPRET DIMS AND TOLERANCES PER ASME Y14.5M -1994  
 UNLESS OTHERWISE SPECIFIED:  
 CORNER FILLETS R.005-020 [127-.508]  
 TOLERANCES:  
 ANGLES: ± 1°  
 1 PLACE .X: ± .015 [0.38]  
 2 PLACE .XX: ± .01 [0.3]  
 3 PLACE .XXX: ± .005 [0.13]

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THIRD ANGLE PROJECTION	
APPROVALS	DATE
DRAWN TRK	10/27/20
CHECKED BY	
APPROVED	

SEE REVERSE SIDE FOR CONFIGURATION OPTIONS

CATALOG SHEET, 428  
 DIAPHRAGM VALVE STANDARD MODEL

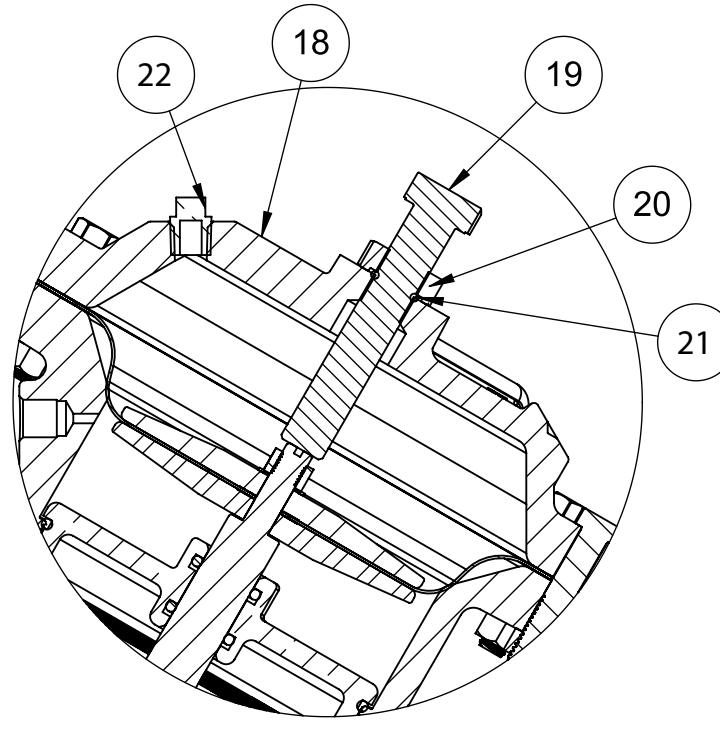
C	DWG NO. 1077618	REV. U
SCALE	SOLIDWORKS FORMAT	SHEET 1 OF 1

**TORQUE TABLE**

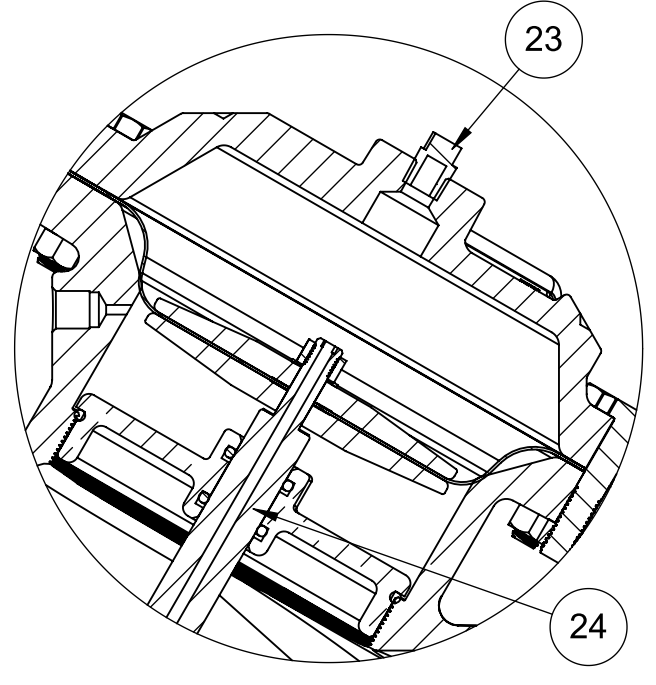
ITEM #	DESCRIPTION	TORQUED TO (+/- 10%)
20	NUT, LIMIT STOP	140 IN/LBS
31	PI ROD GUIDE	140 IN/LBS
33	NUT, TOP, 428, PI	140 IN/LBS
37	NUT, SPRG RETAINER	140 IN/LBS

REVISIONS

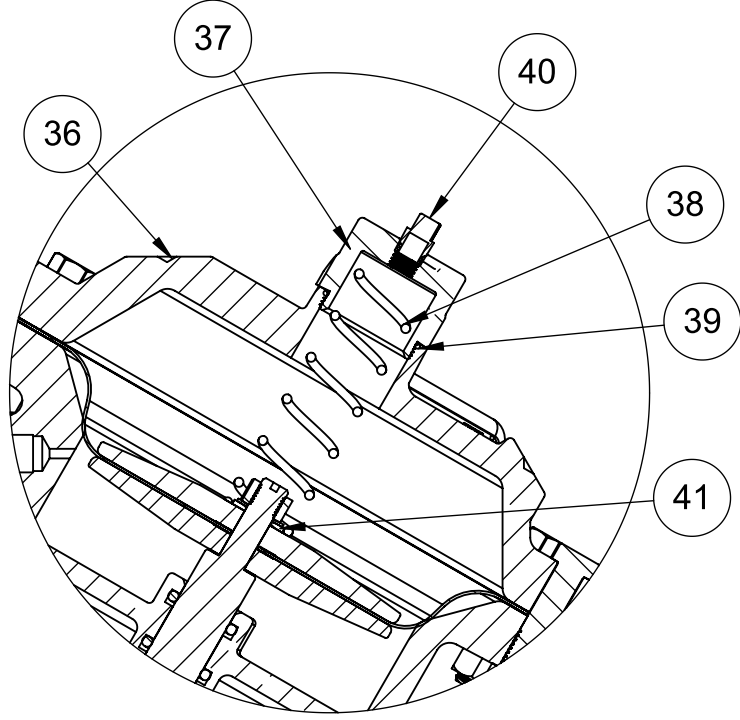
ECN	REV.	DESCRIPTION	DATE	APP'D
SEE SHEET 1 FOR NOTES				



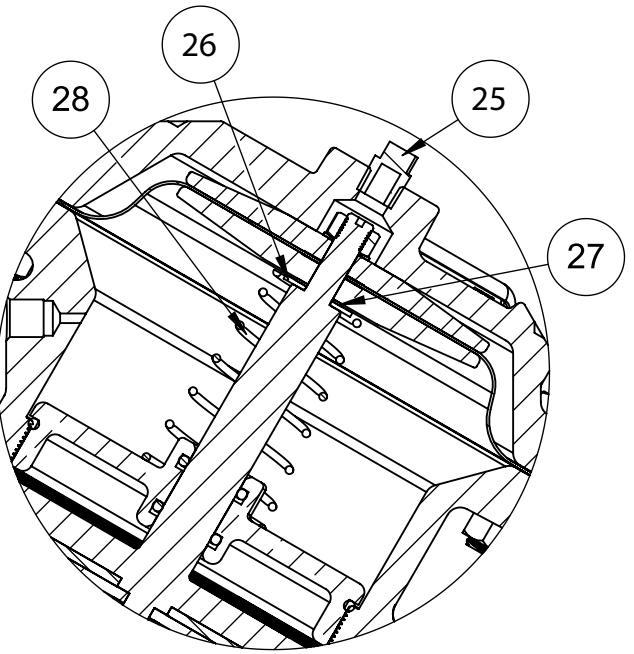
1073151 (V42K-3010-00000)  
LIMIT STOP



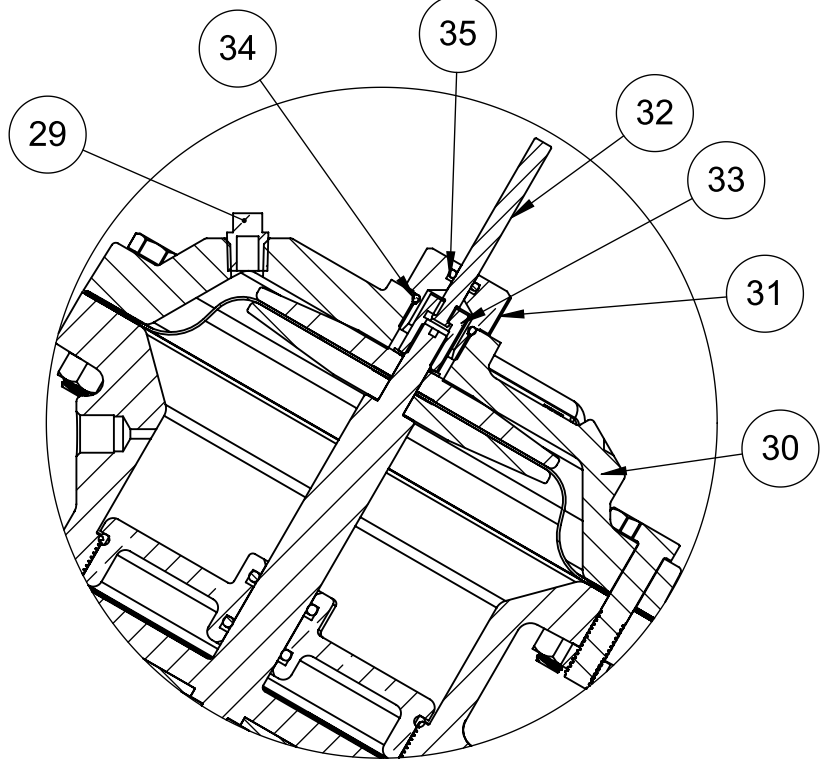
1073158 (V42K-3030-00000)  
NORMALLY CLOSED



1073148 (V42K-3002-00000)  
SPRING ASSIST CLOSED



1073146 (V42K-3001-00000)  
SPRING ASSIST OPEN



1073156 (V42K-3021-00000)  
POSITION INDICATOR

**LIMIT STOP MODEL**

ITEM NO.	DESCRIPTION	STD.	PART NUMBER	QTY.
18	CAP, 428, LS	CAST IRON	* 1074542	1
19	SCREW, 5/8-18 X 3.50 HEX HD.	STAINLESS STEEL	* 1072365	1
20	NUT, LIMIT STOP	STAINLESS STEEL	* 1074434	1
21	O-RING, 2-112	NITRILE	* 1071690	1
22	MALE PIPE PLUG, 1/4 NPT	PLATED STEEL	* 1071918 (PLZ-0008)	1

**NORMALLY CLOSED MODEL**

ITEM NO.	DESCRIPTION	STD.	PART NUMBER	QTY.
23	MALE PIPE PLUG, 1/4 NPT	PLATED STEEL	* 1071918 (PLZ-0008)	1
24	NORMALLY CLOSED COMBINATION SHAFT	STAINLESS STEEL	* 4510302-02 (428-LLA)	1

**SPRING ASSIST OPEN MODEL**

ITEM NO.	DESCRIPTION	STD.	PART NUMBER	QTY.
25	MALE PIPE PLUG, 1/4 NPT	PLATED STEEL	* 1071918 (PLZ-0008)	1
26	WASHER	BRASS	* 1074610	1
27	GASKET, CDA 110	COPPER	* 1073950	1
28	SPRING, COMPRESSION	STAINLESS STEEL	* 1074600	1

**POSITION INDICATOR MODEL**

ITEM NO.	DESCRIPTION	STD.	PART NUMBER	QTY.
29	MALE PIPE PLUG, 1/4 NPT	PLATED STEEL	* 1071918 (PLZ-0008)	1
30	CAP, 428, PI	CAST IRON	* 1074549	1
31	PI ROD GUIDE, V42	BRASS	* 1074121	1
32	SHAFT, 428	STAINLESS STEEL	* 1074593	1
33	NUT, TOP, 428, PI	BRASS	* 1074608	1
34	O-RING, 2-116	BUNA-N	* 1071692	1
35	O-RING, 2-108, TEFLON COAT	BUNA N	* 1071688	1

**SPRING ASSIST CLOSED MODEL**

ITEM NO.	DESCRIPTION	STD.	PART NUMBER	QTY.
36	CAP, 428, CI	CAST IRON	* 1074540 (428-CC)	1
37	NUT, SPRING RTNR	STAINLESS STEEL	* 1074433	1
38	COMPRESSION SPRING, 428 SAC	STAINLESS STEEL	* 1074607	1
39	O-RING, 2-025	BUNA N	* 1071677 (ORB-025)	1
40	MALE PIPE PLUG, 1/8" NPT	BRASS	* 1071903	1
41	WASHER, CENTERING, BRASS	BRASS	* 1074530	1

**REPAIR PARTS KITS**

DESCRIPTION	PART NO.
INT. PARTS KIT (LIMITED STOP) CONSISTS OF STANDARD ITEM NO'S 19, 20, 21	1074583 (428-LS)
INT. PARTS KIT (NORM. CLOSED) CONSISTS OF STANDARD ITEM NO'S 5(2), 7, 9, 10(2), 24	1070134 (428-RG)
INT. PARTS KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 38, 39, 41	1074602 (428-SC)
INT. PARTS KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 26, 27, 28	1074604 (428-SO)
INT. PARTS KIT (POSITION INDICATOR)CONSISTS OF STANDARD ITEM NO'S 10(2), 31 THRU 35	1074591 (428-PI)

**CONVERSION KITS**

DESCRIPTION	PART NO.
CONVERSION KIT (LIMITED STOP) CONSISTS OF STANDARD ITEM NO'S 18, 19, 20, 21	1074584 (428-LSC)
CONVERSION KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 36 THRU 41	1074603 (428-SCC)
CONVERSION KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 26, 27, 28	1074606 (428-SOC)
CONVERSION KIT (POSITION INDICATOR) CONSISTS OF STANDARD ITEM NO'S 10(2), 29 THRU 35	1074592 (428-PIC)

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

SEE REVERSE SIDE FOR STANDARD NORMALLY OPEN MODEL

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 \*CORNER FILLETS R.005-.020 [1.27-.508]  
 TOLERANCES:  
 ANGLES: ±1°  
 1 PLACE .X: ±.100 [2.54]  
 2 PLACE .XX: ±.010 [0.25]  
 3 PLACE .XXX: ±.005 [0.13]

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THIRD ANGLE PROJECTION

APPROVALS

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APPROVED

DATE

10/27/20

**CATALOG SHEET, 428**  
**DIAPHRAGM VALVE STANDARD MODEL**

SIZE **C** DWG NO. **1077618** REV. **U**

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