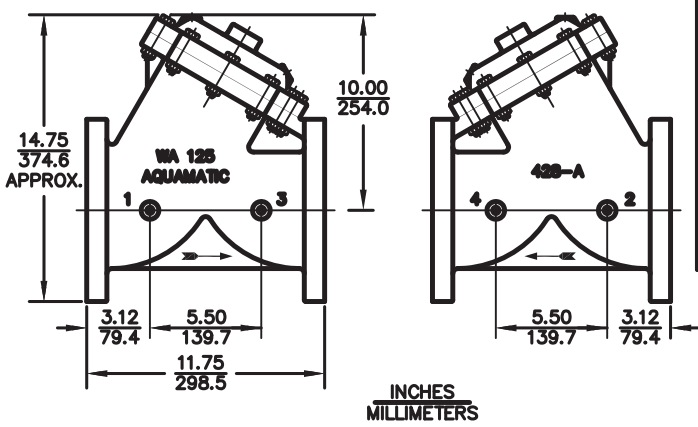


4" DIAPHRAGM VALVE - STANDARD MODEL

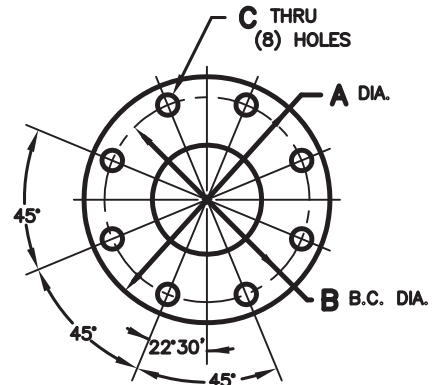
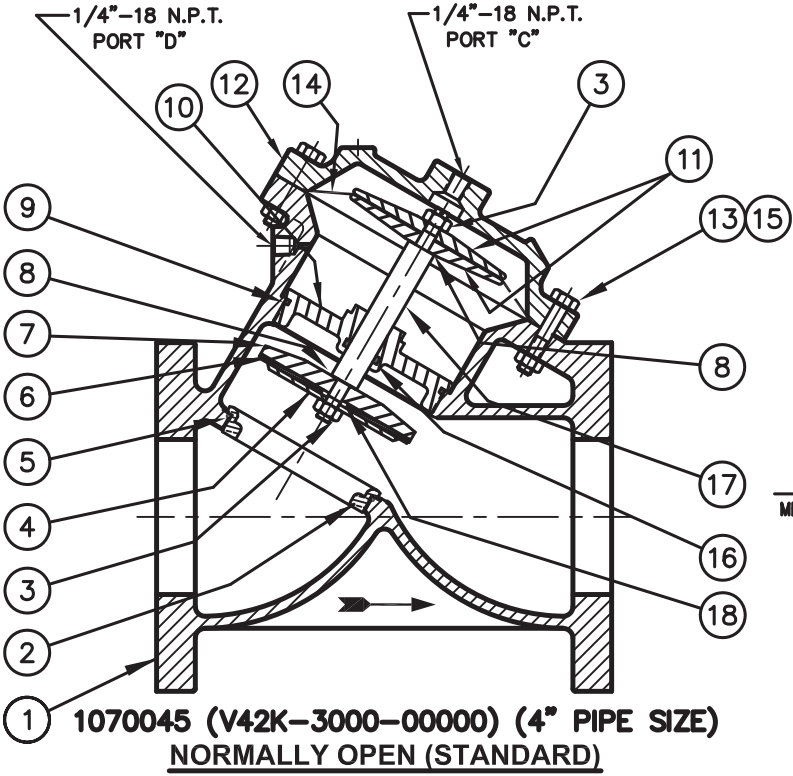


REPAIR PARTS KITS			
DESCRIPTION	PART NO.		
DIAPHRAGM & SEALS KIT CONSISTS OF ITEM NO'S 3(2),5,6,8(2),9,14,16	1070073 (428-RA)	1070086 (428-RAE)	1070098 (428-RAV)
	BUNA N INCLUDES DIAPHRAGM 1074557 (428-FB)	E.P.D.M. INCLUDES DIAPHRAGM 1074557 (428-FB)	FKM INCLUDES DIAPHRAGM 1074559 (428-FV)
	1070123 (428-RF)		
INT. PARTS KIT (NORM. OPEN) CONSISTS OF STANDARD ITEM NO'S 4,7,10,11(2),17,18	1070123 (428-RF)		
SEAT (ITEM NO. 2)	1074585 (428-MAO)		

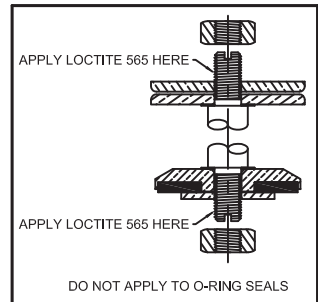
NOTE:  
1. AMERICAN NATIONAL STANDARD TAPER PIPE  
THREADS (NPT) PER ANSI B2.1-1968  
2. VALVES AVAILABLE WITH B.S.P. END CONNECTIONS.

ASSEMBLY TOOLS	
DESCRIPTION	PART NO.
FOR INSTALLATION & REMOVAL OF SHAFT GUIDE (ITEM #10) (NOT SHOWN)	1-1/4" HEX SOCKET

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



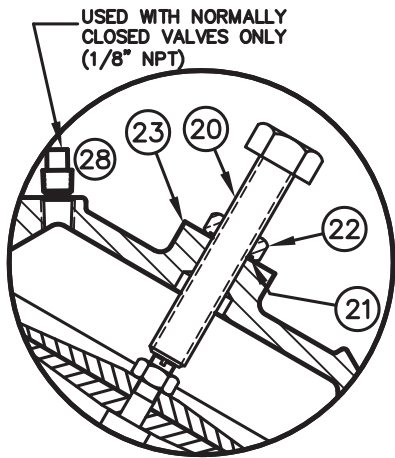
AMERICAN FLANGE PER A.S.A. 16.1 CLASS 125  
METRIC FLANGE PER BS 4504, DIN 10 & ISO R 2084



NO.	DESCRIPTION	STD	PART NO.	QTY.
1	BODY	CAST IRON	* 1074522 (428-A)	1
2	SEAT	BRASS	* 1074585 (428-MAO)	1
		STN. STL.	1074586 (428-MAVO)	
3	HEX NUT (3/8-24)		* 3001990	2
4	DISC PLATE	BRASS	* 1074574 (428-K)	1
		STN. STL.	1074576 (428-KAV)	
5	O-RING	BUNA N	* 1071697 (ORB-156)	1
		E.P.D.M.	1071739 (ORE-156)	
		FKM	1071811 (ORV-156)	
6	DISC	BUNA N	* 1074568 (428-J)	1
		E.P.D.M.	1074570 (428-JE)	
		FKM	1074573 (428-JV)	
		HYCAR	1074571 (428-JH)	
7	DISC HOLDER	BRASS	* 1074587 (428-N)	1
		STN. STL.	1074590 (428-NS)	
8	GASKET	COPPER	* 1073950 (200-LL)	2
9	O-RING	BUNA N	* 1071711 (ORB-245)	1
		E.P.D.M.	1071759 (ORE-245)	
		FKM	1071832 (ORV-245)	
10	SHAFT GUIDE	BRASS	* 1074563 (428-GO)	1
		STN. STL.	1074561 (428-GASO)	
11	DIAPHRAGM PLATE	BRASS	* 1074553 (428-D)	2
			1074554 (428-DA)	
		STN. STL.	1074555 (428-DA)	
12	CAP	CAST IRON	* 1074532 (428-C)	1
13	HEX SCREW	PLATED STEEL	* 1072406 (SCZ-0027)	11
		STN. STL.	1072391 (SCS-0154)	
14	DIAPHRAGM	BUNA N	* 1074557 (428-FB)	1
		FKM	1074559 (428-FV)	
15	HEX NUT	PLATED STEEL	* 1071658 (NUZ-0014)	11
		STN. STL.	1071652 (NUJ-0014)	
16	O-RING	BUNA N	* 1071702 (ORB-210TC)	1
		E.P.D.M.	1242718 (ORE-210TC)	
		FKM	1242394 (ORV-210TC)	
17	SHAFT (NORMALLY OPEN)		* 1074578 (428-L)	1
18	DISC SPACER	BRASS	* 1074565 (428-HA)	1
		STN. STL.	1074566 (428-HAS)	

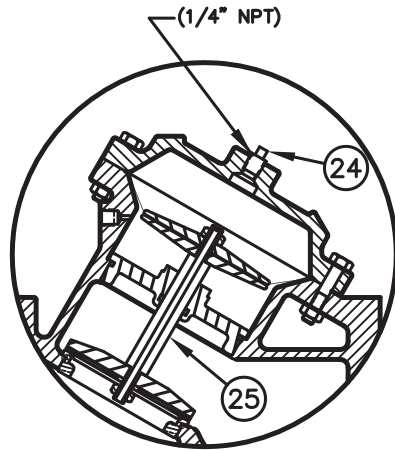
SEE REVERSE SIDE FOR CONFIGURATION OPTIONS  
FORM NO. 1077618

J	ADDED LOCTITE APPLICATION BOX INFO	1713	MSM	30May07	
REV	DESCRIPTION	ECO	DWN	DATE	APVD
		20580 Enterprise Avenue Brookfield, WI 53045 888.784.9065 www.Pentairwatertreatment.com			
<b>SERIES 428 DIAPHRAGM VALVE STANDARD MODEL</b>					
DRAWN	JWB	DATE	02May01	DRAWING NO.	1084023



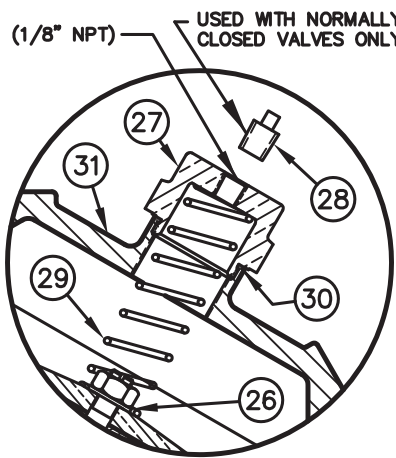
1073151 (V42K-3010-00000)

**LIMIT STOP**



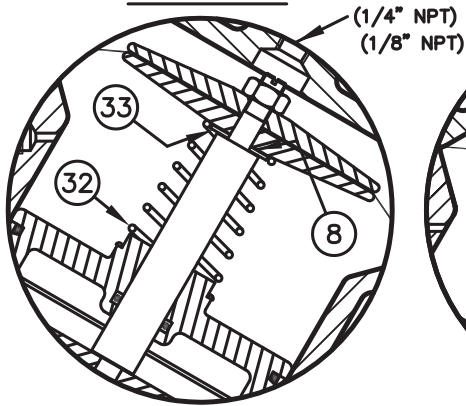
1073158 (V42K-3030-00000)

**NORMALLY CLOSED**



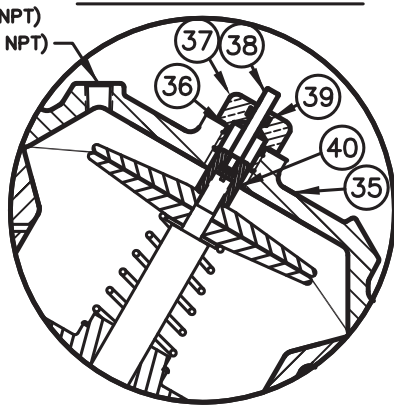
1073148 (V42K-3002-00000)

**SPRING ASSIST CLOSED**



1073146 (V42K-3001-00000)

**SPRING ASSIST OPEN**



1073156 (V42K-3021-00000)

**POSITION INDICATOR**

**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.

SEE REVERSE SIDE FOR STANDARD NORMALLY OPEN MODEL

NO.	DESCRIPTION	STD	PART NO.	QTY.
<b>LIMIT STOP MODEL</b>				
20	SCREW	*	1072365 (SCS-0043)	1
21	O-RING	*	1071690 (ORB-112)	1
22	NUT	*	1074434 (426-U)	1
23	CAP	CAST IRON	* 1074542 (428-CCC)	1
<b>NORMALLY CLOSED MODEL</b>				
24	PIPE PLUG (1/4" N.P.T.)	PLATED STEEL	* 1071918 (PLZ-0008)	1
		BRASS	1071904 (PLB-0009)	
		STN. STL.	1071915 (PLS-0001)	
25	SHAFT (NORMALLY CLOSED)	*	1074581 (428-LL)	1
<b>SPRING ASSIST CLOSED MODEL</b>				
26	CENTERING WASHER	BRASS	* 1074530 (428-AH)	1
		STN. STL.		
27	RETAINER NUT	BRASS	* 1074430 (426-TT)	1
		STN. STL.	1078686	
28	PIPE PLUG (1/8" N.P.T.)	PLATED STEEL	* 1071917 (PLZ-0005)	1
		BRASS	1071903 (PLB-0007)	
		STN. STL.	1071916 (PLS-0002)	
29	SPRING	*	1074607 (428-SS)	1
30	O-RING	*	1071677 (ORB-025)	1
31	CAP	CAST IRON	* 1074540 (428-CC)	1
<b>SPRING ASSIST OPEN MODEL</b>				
8	GASKET	COPPER	* 1073950 (200-LL)	1
		LEAD	1073951 (200-LLL)	
32	SPRING	*	1074600 (428-S)	1
33	CENTERING WASHER	BRASS	* 1074610 (428-V)	1
		STN. STL.		
<b>POSITION INDICATOR MODEL</b>				
35	CAP	CAST IRON	* 1074549 (428-CF)	1
36	O-RING	*	1071692 (ORB-116)	1
37	SHAFT GUIDE BUSHING	*	1074121 (421-GF)	1
38	INDICATOR SHAFT	*	1074593 (428-PM)	1
39	O-RING	*	1071698 (ORB-108TC)	1
40	TOP NUT	*	1074608 (428-TB)	1

CONVERSION KITS	
DESCRIPTION	PART NO.
CONVERSION KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 20,21,22,23	1074584 (428-LSC)
CONVERSION KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 26 THRU 31	1074603 (428-SCC)
CONVERSION KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 8,32,33	1074606 (428-SOC)
CONVERSION KIT (POSITION INDICATOR) CONSISTS OF STANDARD ITEM NO'S 35 THRU 40	1074592 (428-PIC)

REPAIR PARTS KITS	
DESCRIPTION	PART NO.
INT. PARTS KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 20,21,22	1074583 (428-LS)
INT. PARTS KIT (NORM. CLOSED) CONSISTS OF STANDARD ITEM NO'S 4,7,10,11(2),18,25	1070134 (428-RG)
INT. PARTS KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 28,29,30	1074602 (428-SC)
INT. PARTS KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 8,32,33	1074604 (428-SO)
INT. PARTS KIT (POSITION INDICATOR) CONSISTS OF STD ITEM NO'S 36 THRU 40	1074591 (428-PI)

FORM NO. 1077618

J	SEE REVERSE SIDE	1713	MSM	30May07	
REV	DESCRIPTION	ECO	DWN	DATE	APVD

20580 Enterprise Avenue  
Brookfield, WI 53045  
888.784.9065  
www.Pentairwatertreatment.com

SERIES 428 DIAPHRAGM VALVE  
STANDARD MODEL

DRAWN	JWB	DATE	02May01	DRAWING NO.	1084023
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