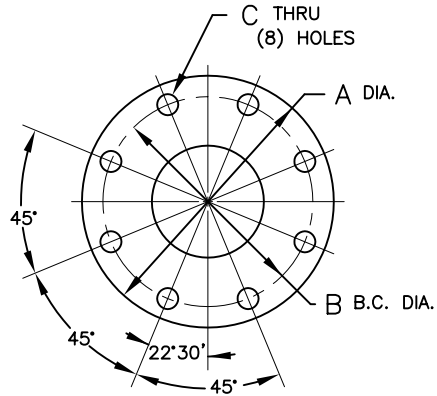
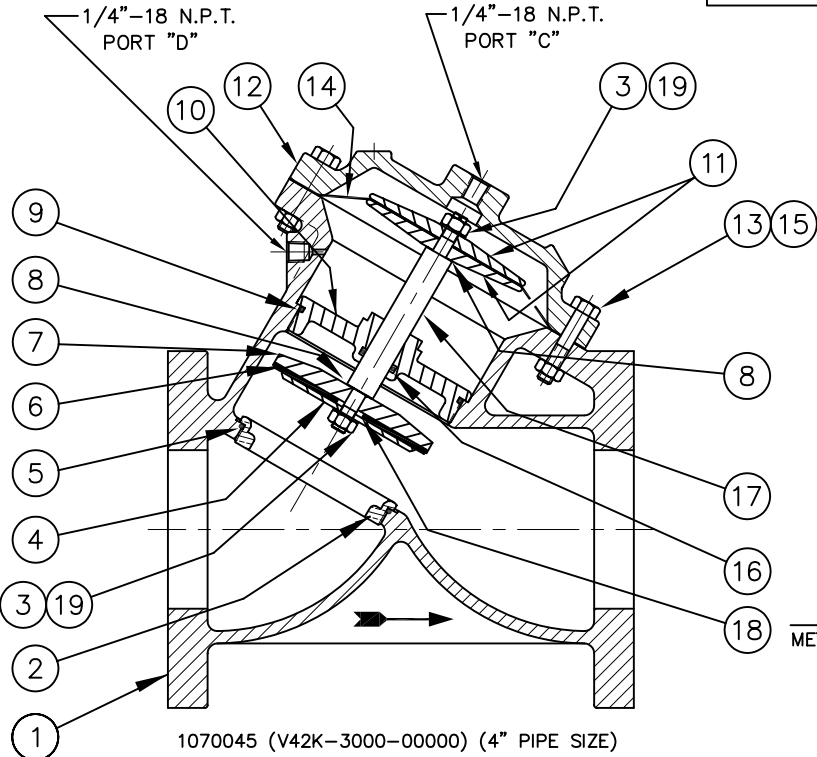


REPAIR PARTS KITS			
DESCRIPTION	PART NO.		
DIAPHRAGM & SEALS KIT CONSISTS OF ITEM NO'S 3(2),5,6,8(2),9,14,16	1070073 (428-RA)	1070086 (428-RAE)	1070098 (428-RAV)
	BUNA N INCLUDES DIAPHRAGM 1074557 (428-FB)	E.P.D.M. INCLUDES DIAPHRAGM 1074557 (428-FB)	FKM INCLUDES DIAPHRAGM 1074559 (428-FV)
INT. PARTS KIT (NORM. OPEN) CONSISTS OF STANDARD ITEM NO'S 4,7,10,11(2),17,18,19	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

1070045 (V42K-3000-00000) (4" PIPE SIZE)
NORMALLY OPEN (STANDARD)

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-MAV0)	
3	HEX LOCK NUT (3/8-24)	BRASS	* 1071653 (NUS-0017)	2
		STN. STL.	1074576 (428-KAV)	
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
		LEAD	1073951 (200-LLL)	
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
		STN. STL.	1074554 (428-DA)	
		STN. STL.	1074555 (428-DAA)	
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 (NUS-0014)	
16	O-RING	BUNA N	* 1071702 (ORB-210TC)	1
		E.P.D.M.	1071744 (ORE-210)	
		FKM	1071815 (ORV-210)	
17	SHAFT (NORMALLY OPEN)		* 1074578 (428-L)	1
18	DISC SPACER	BRASS	* 1074565 (428-HA)	1
		STN. STL.	1074566 (428-HAS)	
19	LOCKWASHER		* 1073591 (WAS-0008)	2

SEE REVERSE SIDE FOR
CONFIGURATION OPTIONS

FORM NO. 1077618

E	ADDED ASSEMBLY TOOL CHART	NONE	MSM	15MAR04
REV	DESCRIPTION	ECO	DWN	DATE APVD

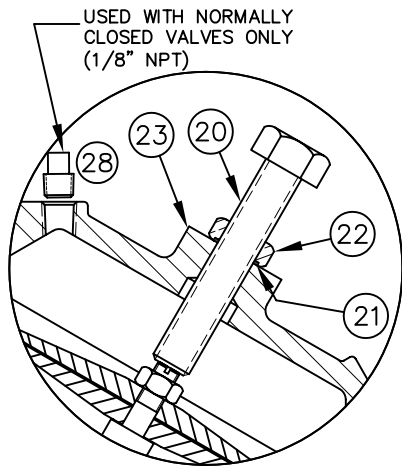


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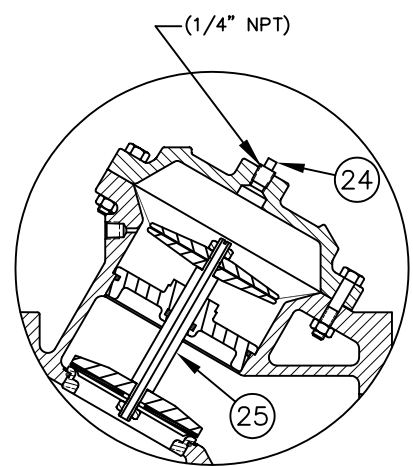
SERIES 428 DIAPHRAGM VALVE
4" PIPE SIZE

SCALE	DRAWN	DATE	DWG. NO.
N/A	JWB	02MAY01	1084023



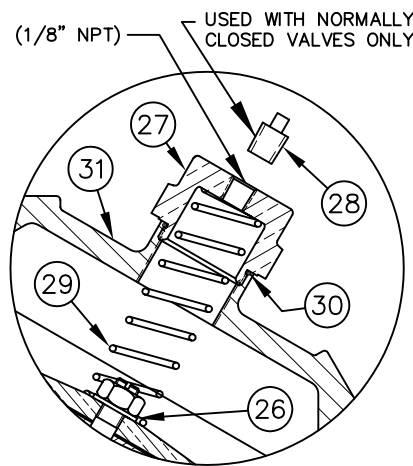
1073151 (V42K-3010-00000)

LIMIT STOP



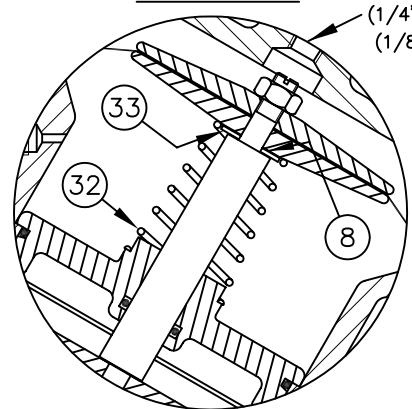
1073158 (V42K-3030-00000)

NORMALLY CLOSED



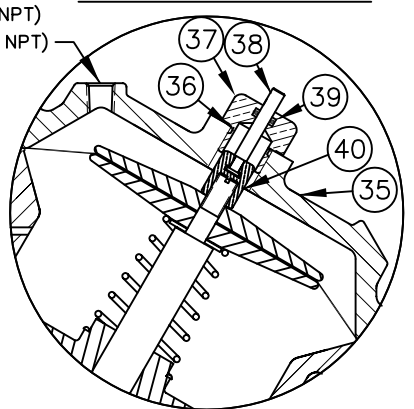
1073148 (V42K-3002-00000)

SPRING ASSIST CLOSED



1073146 (V42K-3001-00000)

SPRING ASSIST OPEN



1073156 (V42K-3021-00000)

POSITION INDICATOR


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 26,29,30	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)

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.

NO.	DESCRIPTION	STD	PART NO.	QTY.
LIMIT STOP MODEL				
20	SCREW	*	1072365 (SCS-0043)	1
21	O-RING	*	1071690 (ORB-112)	1
22	NUT	*	1074434 (426-U)	1
23	CAP	*	1074542 (428-CCC)	1
NORMALLY CLOSED MODEL				
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
SPRING ASSIST CLOSED MODEL				
26	CENTERING WASHER	BRASS	* 1074530 (428-AH)	1
		STN. STL.		
27	RETAINER NUT	BRASS	* 1074430 (426-TT)	1
		STN. STL.	1074433 (426-TTS)	
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	*	1074540 (428-CC)	1
SPRING ASSIST OPEN MODEL				
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.		
POSITION INDICATOR MODEL				
35	CAP	*	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	*	1071688 (ORB-108TC)	1
40	TOP NUT	*	1074608 (428-TB)	1

SEE REVERSE SIDE FOR STANDARD NORMALLY OPEN MODEL
FORM NO. 1077618

E	SEE REVERSE SIDE	NONE	MSM	15MAR04
REV	DESCRIPTION	ECO	DWN	DATE APVD
 OSMONICS <small>ROCKFORD OPERATIONS</small> <small>2412 GRANT AVENUE, ROCKFORD, IL 61103-3991 (815) 964-9421</small> <small>WWW.OSMONICS.COM</small>				
SERIES 428 DIAPHRAGM VALVE				
4" PIPE SIZE				
SCALE N/A	DRAWN JWB	DATE 02MAY01	DWG. NO. 1084023	