

## VALVOLE IDROPNEUMATICHE IN METALLO / METAL DIAPHRAGM VALVES



V42



V42

**CARATTERISTICHE GENERALI:**

Le valvole nella versione standard sono normalmente aperte. Il coperchio ed il corpo valvola sono in ghisa. La membrana interna e gli o-ring sono in Buna, mentre le parti metalliche in acciaio e ottone. Gli attacchi sono disponibili da 3/4" a 3" (B.S.P.) filettati femmina e da 3" (compreso) fino a 6" sono disponibili in versione flangiata ASA class 125, o BSP 4504.

**DATI TECNICI**

- Temperatura massima di esercizio: \_\_\_\_\_ 65°C (150°F)
- Opzione acqua calda: \_\_\_\_\_ 120°C (250°F)
- Pressione di esercizio: \_\_\_\_\_ 8.6 bar (125 PSI)
- Portate: \_\_\_\_\_ vedi diagramma

**SPECIFICHE PRODOTTO**

- Materiale esterno di composizione: \_\_\_\_\_ Ghisa
- Parti interne: \_\_\_\_\_ Acciaio e ottone
- Attacchi filettati disponibili: 3/4" - 1" - 1 1/4" - 1 1/2" - 2" - 2 1/2" - 3"
- Attacchi flangiati disponibili: \_\_\_\_\_ 3" - 4" - 6"

**APPLICAZIONI:**

- Sistemi per trattamento delle acque
- Irrigazioni agricole
- Gestione carburanti
- Raffreddamento torri
- Sistemi per il controllo del livello
- Sistemi di lavaggio autoveicoli
- Sistemi di controllo per il vuoto
- Macchine idrauliche
- Sistemi di raffreddamento
- Separatori centrifughi

Per altre applicazioni, prego non esitate a contattare l'ufficio tecnico Hytek

**OPZIONI:**

- Applicazioni per acqua calda con membrana e tenute in materiale speciale, parti interne in acciaio.
- Normalmente chiusa
- Molla per l'assistenza alla chiusura
- Molla per l'assistenza all'apertura
- Limitatore di flusso

**GENERAL FEATURES**

Standard valves are normally open. Body and cap are of cast iron. Preformed stress-relieved diaphragm of Nitrile (Buna N) on Polyamide, and static seals are Nitrile, stainless steel and brass internal parts. Pipe sizes are 3/4 to 3-inch threaded (B.S.P.); 3-inch through 6-inch flanged drilled in accordance with ASA 16.1 class 125, or BSP 4504.

**TECHNICAL SHEET:**

- Maximum operating temperature: \_\_\_\_\_ 150°F (65°C)
- Option for Hot water applications: \_\_\_\_\_ 250°F (120°C)
- Working Pressure: \_\_\_\_\_ 125 PSI (8.6 bar)
- Flow rates: \_\_\_\_\_ see diagram

**PRODUCT SPECIFICATIONS:**

- External material: \_\_\_\_\_ Cast iron
- Internal parts: \_\_\_\_\_ Stainless steel and brass
- Threaded pipe size: \_\_\_\_\_ 3/4" - 1" - 1 1/4" - 1 1/2" - 2" - 2 1/2" - 3"
- Flanged pipe size: \_\_\_\_\_ 3" - 4" - 6"

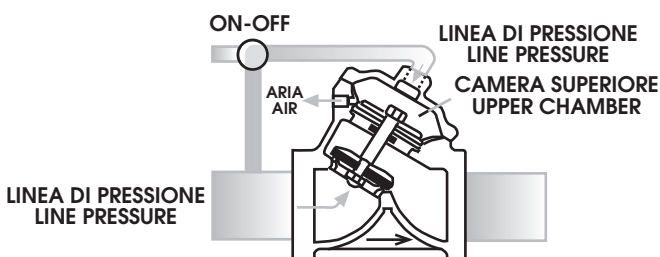
**APPLICATIONS:**

- Water treatment process systems
- Agricultural Irrigation
- Fuel Handling
- Cooling Towers
- Level Control Systems
- Car Wash Systems
- Vacuum Control
- Machine Hydraulic
- Cooling Control
- Centrifugal Separators

For other applications please contact Hytek technical office

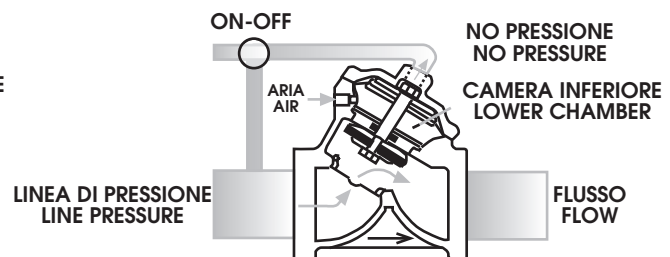
**OPTIONS:**

- Hot Water optional seal and diaphragm materials for special application, stainless steel internal parts.
- Normally closed
- Spring assist closed
- Spring assist open
- Limit stop

**VALVOLA CHIUSA  
VALVE CLOSE**

**Chiusura stagna:** La chiusura viene ottenuta dirigendo la pressione dell'acqua (o una pressione equivalente) nella camera superiore. Questa pressione grazie alla membrana con superficie ampia, causa lo spostamento del gruppo pistone in chiusura. (La superficie della membrana è 1.3 volte maggiore della superficie del disco inferiore)

**Drip-Tight Closing:** Closure is obtained by directing line pressure or equivalent independent pressure into the upper chamber. This pressure on the large diaphragm area causes the valve disc to seal against the seat. (Ratio of diaphragm to disc area is 1.3 or greater.)

**VALVOLA APERTA  
VALVE OPEN**

**Apertura della valvola:** quando si chiude la linea di pressione nella camera superiore, la valvola si apre spinta dalla pressione del fluido sul disco inferiore.

**Full Open Operation:** When closing pressure in upper chamber is relieved by venting the pilot line, the valve opens, positively, by line pressure on the disc.

PORTATE E DIMENSIONI DELLE VALVOLE IN GHISA V42 / V42 FLOW THRU AND DIMENSIONS OF METAL DIAPHRAGM VALVES

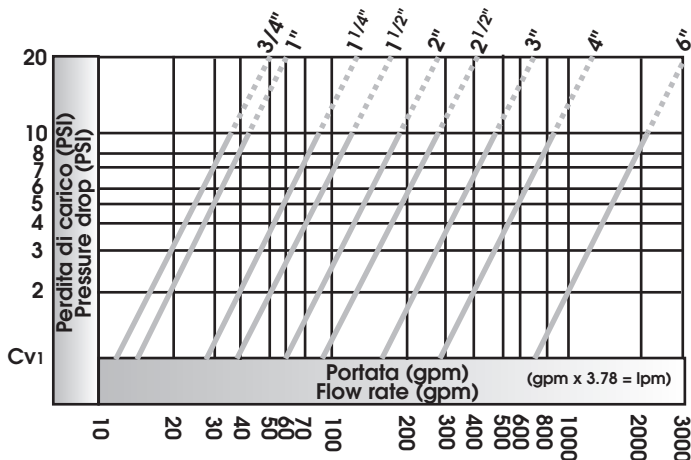
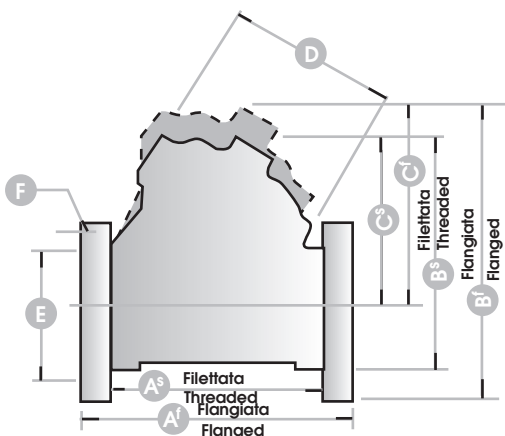
Attacco Pipe size		Cv3	Unità Unit	As	Af	Bs	Bf	Cs	Cf	D	E(1)	F(2)
Filettate / Threaded	3/4"	11.4	in.	3.69		4.25		3.75		2.75		
	1"	12.8	mm	94		108		95		70		
	1-1/4"	26.5	in.	4.75		5.37		4.00		3.50		
	1-1/2"	32.5	mm	121		137		102		89		
	2"	56	in.	6.62		7.25		5.37		4.87		
	2-1/2"	84	mm	187		203		146		140		
	3"	134	in. mm	9.00 229		9.75 248		6.75 171		7.25 184		
Flangiata / Flanged	3"	134	in. mm		10.62 270		10.75 273		7.00 178	7.25 184	6.00 152	0.75 19
	4"	275	in. mm		11.75 298		14.75 375		10.00 254	8.75 222	7.50 191	0.75 19
	6"	680	in. mm		17.00 432		19.00 483		13.50 343	15.75 402	9.50 241	0.87 2

(1) Distanza fori  
(1) Bolt circle diameter

(2) Diametro fori  
(2) Bolt hole diameter

(3) CV = Portata in gpm d' acqua a 24°C con 0,07 di DP  
(3) CV = Flow rate in gpm of water at 60°F @ 1psi pressure drop

PORTATE E PERDITE DI CARICO  
FLOW AND PRESSURE DROPS

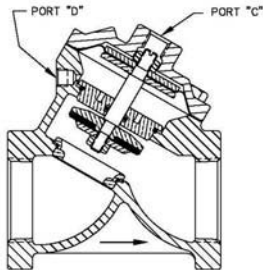


— Portata massima in continuo alla velocità di 25 m/h  
Maximum continuous flow at velocity 20 ft/sec  
..... Portata massima intermittente alla velocità di 37,5 m/h  
Maximum intermittent flow at velocity 30 ft/sec

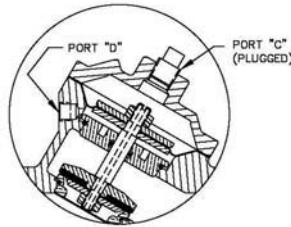
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CONFIGURAZIONE VALVOLE IDROPNEUMATICHE IN MATALO - MODELLI STANDARD / METAL DIAPHRAGM VALVES CONFIGURATIONS - STANDARD MODEL

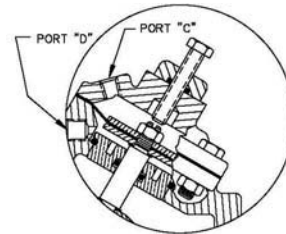
NORMALMENTE APERTA  
NORMALLY OPEN



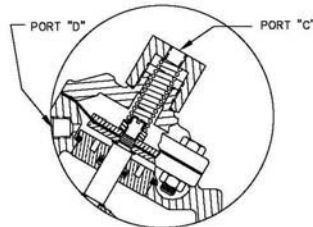
NORMALMENTE CHIUSA  
NORMALLY CLOSED



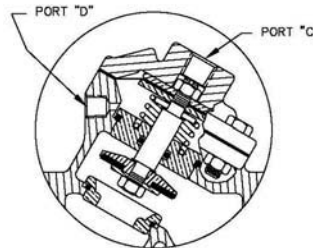
LIMITATORE DI PORTATA  
LIMIT STOP



MOLLA ASSISTENZA ALLA CHIUSURA  
SPRING ASSIST CLOSED



MOLLA ASSISTENZA ALL' APERTURA  
SPRING ASSIST OPEN



SERIES	PIPE SIZE	SEAT DIAMETER IN. CM.	SEAT AREA SQ. IN. SQ. CM.	DIAPHRAGM AREA SQ. IN. SQ. CM.	TOTAL STROKE IN. CM.	DIAPHRAGM CHAMBER (VOLUME) CUBIC IN. CUBIC CM.	* Cv	** Kv	FLOW RATE		PRESSURE DROP	
									@ 10 FT./SEC. (3 M./SEC.) NOTE 1 GAL./MIN. CU.M/HR	@ 20 FT./SEC. (6 M./SEC.) NOTE 2 GAL./MIN. CU.M/HR	@ 10 FT./SEC. (3 M./SEC.) NOTE 1 P.S.I. bar	@ 20 FT./SEC. (6 M./SEC.) NOTE 2 P.S.I. bar
									V42B	3/4"	0.97 2.5	0.74 4.8
V42C	1"	0.97 2.5	0.74 4.8	2.10 13.0	0.47 1.2	2.06 33.8	12.8	11.0	23 5	46 10	3.2 0.22	13.0 0.9
V42D	1 1/4"	1.34 3.4	1.41 9.1	6.49 41.9	0.61 1.5	5.20 85.2	26.5	23	44 10	88 20	2.8 0.2	11.0 0.7
V42E	1 1/2"	1.34 3.4	1.41 9.1	6.49 41.9	0.61 1.5	5.20 85.2	32.5	28	44 10	88 20	1.8 0.12	7.3 0.5
V42F	2" (425)	2.02 5.1	3.20 20.6	11.04 71.2	0.70 1.8	10.50 172.1	56	48	100 23	200 46	3.2 0.22	12.7 0.87
V42G	2" (426)	2.31 5.9	4.19 27.0	15.03 97.0	0.99 2.5	16.34 267.8	68	59	130 29	260 58	3.7 0.25	14.7 1.01
V42H	2 1/2"	2.31 5.9	4.19 27.0	15.03 97.0	0.99 2.5	16.34 267.8	84	72	130 29	260 58	2.4 0.16	9.7 0.67
V42J	3"	2.96 7.5	6.88 44.4	22.69 146.4	1.05 2.7	32.80 537.6	134	116	214 49	428 98	2.6 0.18	10.2 0.7
V42K	4"	3.84 9.7	11.58 74.7	33.82 218.2	1.92 4.9	78.83 1292.0	275	238	380 83	720 166	1.7 0.12	6.9 0.47
V42L	6"	6.06 15.4	28.84 186.1	120.28 776.0	1.70 4.3	296.52 4860.0	680	588	899 204	1798 408	1.8 0.12	7.0 0.5

\* Cv - FLOWRATE (GAL./MIN.) OF WATER AT 60° F. AT 1 P.S.I. PRESSURE DROP

\*\* Kv - FLOWRATE (CU. M./HR) OF WATER AT 15.5° C. AT 1 BAR PRESSURE DROP

NOTE 1: MAXIMUM CONTINUOUS VELOCITY THROUGH THE VALVE.

NOTE 2: MAXIMUM CONTINUOUS VELOCITY, EXTENDED SERVICE AT THIS VELOCITY MAY CAUSE CAVITATION.

THE DATA PRESENTED HERE IS BELIEVED TO BE RELIABLE AND OFFERED AS SUGGESTION ONLY. ACTUAL RESULTS MAY VARY DEPENDING UPON APPLICATION.

TO DETERMINE FLOWRATE AT ANY GIVEN PRESSURE DROP, THE FOLLOWING FORMULAS CAN BE USED.

FOR WATER AND LIQUIDS:

$$Q = \frac{Cv \sqrt{\Delta P}}{\sqrt{e}}$$

FOR AIR AND GAS:

WHEN P2 < .5P1      WHEN P2 > .5P1

$$Cv = \frac{CFM \sqrt{e}}{.5P1} \quad Cv = \frac{CFM \sqrt{e}}{\sqrt{\Delta P P2}}$$

Q - FLOWRATE IN GAL./MIN.  
ΔP - PRESSURE DROP (LB./SQ. IN.)  
e - SPECIFIC GRAVITY (WATER = 1.00)

CFM - CU. FT./MIN. FLOW  
e - SPECIFIC GRAVITY (AIR = 1.00)  
P1 - INLET PRESSURE (LB./SQ. IN.)  
P2 - OUTLET PRESSURE (LB./SQ. IN.)

## VALVLE IN GHISA 3/4" - 1" / 3/4" - 1" METAL DIAPHRAGM VALVES

1/8" - 27 NPT  
PORT "D"

1/4" - 18 NPT  
PORT "C"

INCHES  
MILLIMETERS

**REPAIR PARTS KITS**

DESCRIPTION	PART NO.
DIAPHRAGM & SEALS KIT CONSISTS OF ITEM NOS 3(2),5,6(2),9,14,16	1070068 (421-RA) 1070069 (421-RAE) 1070083 (421-RM) 1070118 (421-IB) 1074120 (421-IV)
INT. PARTS KIT (NORM. OPEN) CONSISTS OF STANDARD ITEM NOS 4,7,10,11(2),17	1070118 (421-RP)
SEAT (ITEM NO. 2)	1074158 (421-MO)

**ASSEMBLY TOOLS**

DESCRIPTION	PART NO.
FOR INSTALLATION & REMOVAL OF SEAT (ITEM #2) (TOOL NOT SHOWN)	1074161 (421-MT)
FOR INSTALLATION & REMOVAL OF SHAFT GUIDE (ITEM #10) (TOOL NOT SHOWN)	1074124 (421-GT)

**NOTE:**

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

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1070001 (V42B-0000-00000) (3/4" NPT)  
1070011 (V42C-0000-00000) (1" NPT)  
**NORMALLY OPEN (STANDARD)**

NO.	DESCRIPTION	STD.	PART NO.	QTY.
1	CAST IRON	3/4" NPT	1074085 (421-A3)	*
1	CAST BRASS	1" NPT	1074088 (421-AA)	1
2	SEAT (REQ'S ASSY TOOL)	3/4" NPT	1074077 (421-AB)	1
3	HEX LOCK NUT (1/4"-28)	BRASS	1074080 (421-AB)	1
4	DISC PLATE	STN. STL.	1074158 (421-MO)	1
5	O-RING	BRASS	1074160 (421-M5)	2
6	DISC	STN. STL.	1074147 (421-K)	1
7	DISC HOLDER	BRASS	1074149 (421-K3)	1
8	GASKET	BUANA N	1074148 (421-K4)	1
9	O-RING	E.P.D.M.	1074143 (421-JE)	1
10	SHAFT GUIDE (REQ'S ASSY TOOL)	BRASS	1074144 (421-JI)	1
11	DIAPHRAGM PLATE	STN. STL.	1074126 (421-H)	1
12	CAP	CAST IRON	1074128 (421-H3)	1
13	HEX SCREW	PLATED STEEL	1074122 (421-G3)	1
14	DIAPHRAGM	BUANA N	1074123 (421-G5)	1
15	HEX NUT	CAST BRASS	1074117 (421-D)	2
16	O-RING	BRASS	1074093 (421-C)	1
17	SHAFT (NORMALLY OPEN)	PLATED STEEL	1074096 (421-B)	1

SEE REVERSE SIDE FOR  
CONFIGURATION OPTIONS  
FORM NO. 1077613

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VALVULE IN GHISA 3/4" - 1" / 3/4" - 1" METAL DIAPHRAGM VALVES

1072563 (V42B-0010-00000) (3/4" NPT)  
1070015 (V42C-0010-00000) (1" NPT)

**LIMIT STOP**  
(1/4" NPT)  
(1/8" NPT)

1070002 (V42B-0030-00000) (3/4" NPT)  
1070012 (V42C-0030-00000) (1" NPT)

**NORMALLY CLOSED**  
(1/4" NPT)

1070003 (V42B-0002-00000) (3/4" NPT)  
1070013 (V42C-0002-00000) (1" NPT)

**SPRING ASSIST CLOSED**  
(1/8" NPT)

1070004 (V42B-0001-00000) (3/4" NPT)  
1070014 (V42C-0001-00000) (1" NPT)

**SPRING ASSIST OPEN**  
(1/4" NPT)

1070144 (V42B-0021-00000) (3/4" NPT)  
1072048 (V42C-0021-00000) (1" NPT)

**POSITION INDICATOR**  
(1/4" NPT)

**CONVERSION KITS**

DESCRIPTION	PART NO.
CONVERSION KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 18 THRU 21	1074155 (421-LS0)
CONVERSION KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 24 THRU 29	1074177 (421-SC0)
CONVERSION KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 4,8,10,31	1074179 (421-S00)
CONVERSION KIT (POSITION INDICATOR) CONSISTS OF STANDARD ITEM NO'S 32 THRU 38	1074163 (421-PI0)

**REPAIR PARTS KITS**

DESCRIPTION	PART NO.
INT. PARTS KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 18,19,20	1074154 (421-LS)
INT. PARTS KIT (NORM. CLOSED) CONSISTS OF STANDARD ITEM NO'S 4,7,10,11(2),23	1070129 (421-R0)
INT. PARTS KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 24,27,28	1074176 (421-SC)
INT. PARTS KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 4,8,31	1074178 (421-S0)
INT. PARTS KIT (POSITION INDICATOR) CONSISTS OF STD ITEM NO'S 33 THRU 38	1074182 (421-PI)

**NOTE:**

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

**POSITION INDICATOR MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY
4	DISC PLATE		BRASS * 1074147 (421-K)	1
			STN. STL. 1074149 (421-KS)	1
8	GASKET		COPPER * 1073948 (200-G0)	1
			LEAD 1073949 (200-G0L)	1
31	SPRING		* 1074175 (421-S0)	1

**SPRING ASSIST OPEN MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY
24	CENTERING NUT		* 1074185 (421-X)	1
			BRASS 1074183 (421-TD)	1
25	RETAINER NUT		STN. STL. 1074184 (421-TS)	1
26	PIPE PLUG		PLATED STEEL * 1071917 (PIZ-0005)	1
			BRASS 1071903 (PIB-0007)	1
			STN. STL. 1071916 (PI-S-0002)	1
27	SPRING		* 1074180 (421-SS)	1
			* 1071674 (0RB-020)	1
28	O-RING		* 1074099 (421-CC)	1
29	CAP		CAST BRASS 1074100 (421-C0B)	1

**SPRING ASSIST CLOSED MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY
18	SCREW		* 1072361 (SCS-0030)	1
19	O-RING		* 1071668 (0RB-012)	1
20	HEX NUT		* 1072534 (400-H)	1
			CAST IRON 1074101 (421-C0C)	1
21	CAP		CAST BRASS 1074104 (421-C0B)	1

**NORMALLY CLOSED MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY
22	PIPE PLUG		PLATED STEEL * 1071918 (PIZ-0009)	1
			BRASS 1071904 (PIB-0009)	1
			STN. STL. 1071915 (PI-S-0001)	1
23	SHAFT (NORMALLY CLOSED)		* 1074153 (421-LD)	1

SEE REVERSE SIDE FOR STANDARD NORMALLY OPEN MODEL

## VALVE IN GHISA 1 1/4" - 1 1/2" / 1 1/4" - 1 1/2" METAL DIAPHRAGM VALVES

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1/8"-27 NPT PORT "D"

1/4"-18 NPT PORT "C"

1070023 (V42D-0000-00000) (1-1/4" NPT)  
1070025 (V42E-0000-00000) (1-1/2" NPT)

**NORMALLY OPEN (STANDARD)**

INCHES

MILLIMETERS

**REPAIR PARTS KITS**

DESCRIPTION	PART NO.
DIAPHRAGM & SEALS KIT CONSISTS OF ITEM NO'S 3,5,6,8,9,12,15,16,18	1070069 (424-80) 1070068 (424-90) 1070064 (424-M)
INT. PARTS KIT (NORM. OPEN) CONSISTS OF STANDARD ITEM NO'S 4,7,10,11(2),19	1070119 (424-RF)
SEAT (ITEM NO. 2)	1074245 (424-MO)

**ASSEMBLY TOOLS**

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

**NOTE:**

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

SEE REVERSE SIDE FOR CONFIGURATION OPTIONS

NO.	DESCRIPTION	STD.	PART NO.	QTY.
1	CAST IRON	1-1/4" NPT	1074196 (424-A5)	1
1	CAST BRASS	1-1/2" NPT	1074199 (424-A6)	1
2	SEAT (REQ'S ASSY TOOL)	1-1/2" NPT	1074190 (424-A8)	1
3	HEX LOCK NUT (1/4"-28)	STN. STL.	1074248 (424-MO)	1
4	DISC PLATE	BRASS	1071850 (NMS-0010)	1
5	O-RING	STN. STL.	1074237 (424-K)	1
5	O-RING	BUINA N	1071678 (08B-028)	1
5	O-RING	E.P.D.M.	1071723 (08C-028)	1
5	O-RING	WTON	1071793 (08A-028)	1
6	DISC	BUINA N	1074232 (424-J)	1
6	DISC	E.P.D.M.	1074233 (424-JE)	1
6	DISC	FKM	1074238 (424-IV)	1
7	DISC HOLDER	HVCAR	1074234 (424-III)	1
7	DISC HOLDER	BRASS	1074229 (424-H)	1
7	DISC HOLDER	STN. STL.	1074231 (424-HS)	1
8	GASKET	LEAD	1073948 (200-05)	1
8	GASKET	COPPER	1073948 (200-05)	1
9	O-RING	BUINA N	1071895 (08B-132)	1
9	O-RING	E.P.D.M.	1071724 (08C-132)	1
9	O-RING	FKM	1071808 (08A-132)	1
10	SHAFT GUIDE (REQ'S ASSY TOOL)	BRASS	1074225 (424-G9)	1
10	SHAFT GUIDE (REQ'S ASSY TOOL)	STN. STL.	1074226 (424-G5)	1
11	DIAPHRAGM PLATE	BRASS	1074220 (424-D)	2
11	DIAPHRAGM PLATE	STN. STL.	1074221 (424-D5)	2
12	HEX LOCK NUT (5/16"-24)	*	1071651 (NMS-0013)	1
13	CAP	CAST IRON	1074202 (424-C)	1
13	CAP	CAST BRASS	1074208 (424-CB)	1
14	HEX SCREW	PLATED STEEL	1072399 (S2-007)	4
14	HEX SCREW	STN. STL.	1072392 (S5-0156)	4
15	DIAPHRAGM	BUINA N	1074227 (424-IB)	1
15	DIAPHRAGM	FKM	1074224 (424-IV)	1
16	GASKET	COPPER	1074252 (424-R)	1
16	GASKET	LEAD	1074263 (424-RL)	1
17	HEX NUT	PLATED STEEL	1071856 (NMS-0008)	4
17	HEX NUT	STN. STL.	1071848 (NMS-0007)	4
18	O-RING	BUINA N	1071899 (08B-110C)	1
18	O-RING	E.P.D.M.	1071726 (08C-110C)	1
18	O-RING	FKM	1071799 (08A-110)	1
19	SHAFT (NORMALLY OPEN)	*	1074239 (424-L)	1

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VALVULE IN GHISA 1 1/4" - 1 1/2" / 1 1/4" - 1 1/2" METAL DIAPHRAGM VALVES

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

**LIMIT STOP**  
(1/8" NPT)  
(1/4" NPT)

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

**NORMALLY CLOSED**  
(1/4" NPT)

1072716 (V42D-0002-00000) (1-1/4" NPT)  
1072192 (V42E-0002-00000) (1-1/2" NPT)

**SPRING ASSIST CLOSED**  
(1/8" NPT)  
(USED WITH NORMALLY CLOSED VALVES ONLY.)

**CONVERSION KITS**

DESCRIPTION	PART NO.
CONVERSION KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 20,21,22,23	1074243 (424-LS)
CONVERSION KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 26 THRU 31	1074268 (424-SC)
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-PI)

**POSITION INDICATOR**

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-R)
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	1074266 (424-SO)
INT. PARTS KIT (POSITION INDICATOR) CONSISTS OF STD ITEM NO'S 35 THRU 40	1074249 (424-PI)

**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-R)
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	1074266 (424-SO)
INT. PARTS KIT (POSITION INDICATOR) CONSISTS OF STD ITEM NO'S 35 THRU 40	1074249 (424-PI)

**LIMIT STOP MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY
20	SCREW	*	1072362 (SS-0031)	1
21	O-RING	*	1071668 (ORB-012)	1
22	NUT	*	1077534 (400-H)	1
23	CAP	*	1074210 (424-CCC)	1
			1074213 (424-CCCB)	1

**NORMALLY CLOSED MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY
24	PIPE PLUG (1/4" N.P.T.)	*	1071918 (PIZ-0006)	1
			1071904 (PIB-0009)	1
			1071915 (PI.S-0001)	1
25	SHAFT (NORMALLY CLOSED)	*	1074241 (424-L)	1

**SPRING ASSIST CLOSED MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY
26	CENTERING NUT	*	1074276 (424-X)	1
27	RETAINER NUT	*	1074274 (424-T)	1
			1074275 (424-TS)	1
28	PIPE PLUG (1/8" N.P.T.)	*	1071917 (PIZ-0005)	1
			1071903 (PIB-0007)	1
			1071916 (PI.S-0002)	1
29	SPRING	*	1074270 (424-SS)	1
30	O-RING	*	1071674 (ORB-020)	1
31	CAP	*	1074208 (424-CC)	1
			1074209 (424-CCB)	1

**SPRING ASSIST OPEN MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY
16	GASKET	*	1074252 (424-R)	1
			1074263 (424-RL)	1
32	SPRING	*	1074264 (424-S)	1
33	CENTERING WASHER	*	1074382 (426-HA)	1
			1074384 (426-HAS)	1

**POSITION INDICATOR MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY
34	CAP	*	1074217 (424-CF)	1
			1074218 (424-CFB)	1
35	O-RING	*	1071662 (ORB-116)	1
36	SHAFT GUIDE BUSHING	*	1074121 (421-G)	1
37	INDICATOR SHAFT	*	1074251 (424-PI)	1
38	O-RING	*	1071668 (ORB-108C)	1
39	TOP NUT	*	1074272 (424-IB)	1
40	LOCKWASHER	*	1073590 (WMS-0007)	1

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

VALVE IN GHISA 2" / 2" METAL DIAPHRAGM VALVES

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1070035 (V42F-0000-00000) (2" NPT)  
**NORMALLY OPEN (STANDARD)**

INCHES

MILLIMETERS

REPAIR PARTS KITS	
DESCRIPTION	PART NO.
DIAPHRAGM & SEALS KIT CONSISTS OF ITEM NOS 3(2),5,6,8(2),9,14,16	1070035 (425-RA) 1070036 (425-RAE) 1070036 (425-RAH) 1070036 (425-RAI) 1070036 (425-RAJ) 1070036 (425-RAK) 1070036 (425-RAL) 1070036 (425-RAM) 1070036 (425-RAN) 1070036 (425-RAO) 1070036 (425-RAQ) 1070036 (425-RAU) 1070036 (425-RAV) 1070036 (425-RAW) 1070036 (425-RAZ)
INT. PARTS KIT (NORM. OPEN) CONSISTS OF STANDARD ITEM NOS 4,7,10,11(2),17,18	1070120 (425-RF) 1074321 (425-MO)

ASSEMBLY TOOLS	
DESCRIPTION	PART NO.
FOR INSTALLATION & REMOVAL OF SEAT (ITEM #2) (TOOL NOT SHOWN)	1074411 (426-MT)
FOR INSTALLATION & REMOVAL OF SHAFT GUIDE (ITEM #10) (TOOL NOT SHOWN)	1" HEX SOCKET

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

NO.	DESCRIPTION	STD.	PART NO.	QTY.
1	BODY CAST IRON	*	1074277 (425-A)	1
2	SEAT (REQ'S ASSY TOOL.) BRASS	*	1074321 (425-MO)	1
3	HEX LOCK NUT (5/16-24)	*	1071651 (NUS-0013)	2
4	DISC PLATE BRASS	*	1074220 (424-D)	1
5	O-RING BUENA N E.P.D.M. VITON	*	1071882 (088-035) 1071724 (088-035) 1071794 (088-035)	1
6	DISC BUENA N E.P.D.M. FKM HYCAR	*	1074307 (425-J) 1074308 (425-JE) 1074309 (425-JE) 1074310 (425-JI) 1074312 (425-JV) 1074310 (425-JI)	1
7	DISC HOLDER BRASS	*	1074303 (425-H)	1
8	GASKET COPPER LEAD	*	1074252 (424-R) 1074263 (424-R)	2
9	O-RING BUENA N E.P.D.M. FKM	*	1071884 (088-035) 1071725 (088-035) 1071795 (088-035)	1
10	SHAFT GUIDE (REQ'S ASSY TOOL.) BRASS	*	1074301 (425-RO)	1
11	DIAPHRAGM PLATE BRASS	*	1074293 (425-0)	2
12	CAP CAST IRON	*	1074281 (425-C)	1
13	HEX SCREW PLATED STEEL	*	1074300 (S2Z-0013)	6
14	DIAPHRAGM BUENA N FKM	*	1074296 (425-F3) 1074297 (425-FV)	1
15	HEX NUT PLATED STEEL	*	1071657 (NUT-0011)	6
16	O-RING BUENA N E.P.D.M. FKM	*	1071699 (088-206C) 1071742 (088-206C) 1071813 (088-206)	1
17	SHAFT (NORMALLY OPEN)	*	1074314 (425-1)	1
18	DISC SPACER	*	1074382 (426-HA)	1

SEE REVERSE SIDE  
CONFIGURATION OPTIONS  
FORM NO. 1077615



VALVULE IN GHISA 2" / 2" METAL DIAPHRAGM VALVES

**1070037 (V42F-0010-00000) (2" NPT)**  
**LIMIT STOP**

**1072894 (V42F-0030-00000) (2" NPT)**  
**NORMALLY CLOSED**

**1070036 (V42F-0001-00000) (2" NPT)**  
**SPRING ASSIST OPEN**

**1072893 (V42F-0021-00000) (2" NPT)**  
**POSITION INDICATOR**

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

**CONVERSION KITS**

DESCRIPTION	PART NO.
CONVERSION KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 19,20,21,22	1070320 (425-150)
CONVERSION KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 25 THRU 30	1070320 (425-300)
CONVERSION KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 8,31,32	1070330 (425-50)
CONVERSION KIT (POSITION INDICATOR) CONSISTS OF STANDARD ITEM NO'S 33 THRU 39	1070320 (425-100)

**REPAIR PARTS KITS**

DESCRIPTION	PART NO.
INT. PARTS KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 19,20,21	1070318 (425-15)
INT. PARTS KIT (NORM. CLOSED) CONSISTS OF STANDARD ITEM NO'S 4,7,10,11(2),18,24	1070318 (425-10)
INT. PARTS KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 25,28,29	1070329 (425-50)
INT. PARTS KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 8,30,31	1070330 (425-50)
INT. PARTS KIT (POSITION INDICATOR) CONSISTS OF STD ITEM NO'S 34 THRU 39	1070323 (425-10)

**LIMIT STOP MODEL**

NO.	DESCRIPTION	STD.	PART NO.	QTY.
19	SCREW	*	1072394 (935-0042)	1
20	O-RING	*	1071890 (088-112)	1
21	NUT	*	1070454 (428-01)	1
22	CAP	*	1070285 (425-005)	1

**NORMALLY CLOSED MODEL**

NO.	DESCRIPTION	STD.	PART NO.	QTY.
23	PIPE PLUG (1/4" N.P.T.)	*	1071918 (P12-0008)	1
24	SHAFT (NORMALLY CLOSED)	*	1070317 (425-11)	1

**SPRING ASSIST CLOSED MODEL**

NO.	DESCRIPTION	STD.	PART NO.	QTY.
25	CENTERING WASHER	*	1070403 (421-041)	1
26	RETAINER NUT	*	1070430 (426-17)	1
27	PIPE PLUG (1/8" N.P.T.)	*	1071917 (P12-0005)	1
28	SPRING	*	1071903 (P15-0007)	1
29	O-RING	*	1071428 (426-55)	1
30	CAP	*	1071677 (088-025)	1

**SPRING ASSIST OPEN MODEL**

NO.	DESCRIPTION	STD.	PART NO.	QTY.
8	GASKET	*	1070252 (424-01)	1
31	SPRING	*	1070423 (426-5)	1
32	CENTERING WASHER	*	1070436 (428-1)	1

**POSITION INDICATOR MODEL**

NO.	DESCRIPTION	STD.	PART NO.	QTY.
33	CAP	*	1070288 (425-07)	1
34	O-RING	*	1071892 (088-116)	1
35	SHAFT GUIDE BUSHING	*	1070421 (421-05)	1
36	INDICATOR SHAFT	*	1070325 (425-101)	1
37	O-RING	*	1071888 (088-108)	1
38	TOP NUT	*	1070332 (425-18)	1
39	LOCKWASHER	*	1070590 (W05-0007)	1

VALVOLE IN GHISA 21/2" / 21/2" METAL DIAPHRAGM VALVES

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**REPAIR PARTS KITS**

DESCRIPTION	PART NO.
DIAPHRAGM & SEALS KIT CONSISTS OF ITEM NOS 3(2),5,6,8(2),9,14,16	1070071 (426-M)   1070081 (426-MO)   1070088 (426-MW)
INT. PARTS KIT (NORM. OPEN) CONSISTS OF STANDARD ITEM NOS 4,7,10,11(2),17,18	1070121 (426-MF)
SEAT (ITEM NO. 2)	1074409 (426-MO)

**ASSEMBLY TOOLS**

DESCRIPTION	PART NO.
FOR INSTALLATION & REMOVAL OF SEAT (ITEM #2) (TOOL NOT SHOWN)	1074411 (426-MT)
FOR INSTALLATION & REMOVAL OF SHAFT GUIDE (ITEM #10) (TOOL NOT SHOWN)	1-3/16" HEX SOCKET

**NOTE:**

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

1070041 (V42G-0000-00000) (2" NPT)  
 1070042 (V42H-0000-00000) (2-1/2" NPT)  
**NORMALLY OPEN (STANDARD)**

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NO.	DESCRIPTION	STD.	PART NO.	QTY.
1	BODY	2" NPT	1074343 (426-M)	1
	CAST BRASS	2-1/2" NPT	1081559 (426-M)	
2	SEAT (REQ'S ASSY TOOL)	2-1/2" NPT	1074333 (426-M)	1
	BRASS		1074409 (426-MO)	
3	HEX LOCK NUT (5/16-24)		1071651 (005-003)	2
4	DISC PLATE		1074395 (426-K)	1
	BRASS		1074398 (426-H)	
5	O-RING		1071668 (008-144)	1
	E.P.D.M.		1071737 (00E-144)	
	FKM		1071693 (00E-144)	
6	DISC		1074389 (426-J)	1
	E.P.D.M.		1074391 (426-JE)	
	FKM		1074394 (426-JV)	
	HYCAR		1074392 (426-JH)	
7	DISC HOLDER		1074361 (426-H)	1
	BRASS		1074252 (424-R)	
8	GASKET		1074265 (424-RL)	2
	LEAD			
9	O-RING		1071706 (00E-233)	1
	E.P.D.M.		1071754 (00E-233)	
	FKM		1071626 (00E-233)	
10	SHAFT GUIDE (REQ'S ASSY TOOL)		1074379 (426-GB)	1
	BRASS		1074378 (426-GBS)	
11	DIAPHRAGM PLATE		1074370 (426-D)	2
	BRASS		1074371 (426-DA)	
12	CAP		1081560 (426-C)	1
	CAST IRON		1074348 (426-DB)	
13	HEX SCREW		107401 (52Z-0019)	6
	PLATED STEEL		1072398 (52S-0016)	
14	DIAPHRAGM		1074374 (426-FB)	1
	BUNA N		1074376 (426-FV)	
	FKM		1074367 (00Z-0011)	
15	HEX NUT		1071655 (005-003)	6
	PLATED STEEL			
16	O-RING		1071691 (00E-114C)	1
	BUNA N		1071729 (00E-114C)	
	E.P.D.M.		1071800 (00E-114)	
	FKM		1071800 (00E-114)	
17	SHAFT (NORMALLY OPEN)		1074400 (426-L)	1
	BRASS		1074392 (426-LH)	
18	DISC SPACER		1074394 (426-HS)	1

VALVULE IN GHISA 21/2" / 21/2" METAL DIAPHRAGM VALVES

**LIMIT STOP**  
1072938 (V42G-0010-00000) (2" NPT)  
1072998 (V42H-0010-00000) (2-1/2" NPT)

**NORMALLY CLOSED**  
1072945 (V42G-0030-00000) (2" NPT)  
1073002 (V42H-0030-00000) (2-1/2" NPT)

**SPRING ASSIST OPEN**  
1072932 (V42G-0001-00000) (2" NPT)  
1072994 (V42H-0001-00000) (2-1/2" NPT)

**SPRING ASSIST CLOSED**  
1072935 (V42G-0002-00000) (2" NPT)  
1072996 (V42H-0002-00000) (2-1/2" NPT)

**CONVERSION KITS**

DESCRIPTION	PART NO.
CONVERSION KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NOS 19,20,21,22	1074406 (426-LS)
CONVERSION KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NOS 25 THRU 30	1074405 (426-SC)
CONVERSION KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NOS 8,31,32	1074427 (426-SO)
CONVERSION KIT (POSITION INDICATOR) CONSISTS OF STANDARD ITEM NOS 33 THRU 39	1074414 (426-PI)

**REPAIR PARTS KITS**

DESCRIPTION	PART NO.
INT. PARTS KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NOS 19,20,21	1074405 (426-LS)
INT. PARTS KIT (NORM. CLOSED) CONSISTS OF STANDARD ITEM NOS 4,7,10,11(2),18,24	1070132 (426-NG)
INT. PARTS KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NOS 25,26,29	1074425 (426-SC)
INT. PARTS KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NOS 8,31,32	1074427 (426-SO)
INT. PARTS KIT (POSITION INDICATOR) CONSISTS OF STD ITEM NOS 34 THRU 39	1074413 (426-PI)

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

NO.	DESCRIPTION	STD.	PART NO.	QTY.
<b>LIMIT STOP MODEL</b>				
19	SCREW	*	1072364 (SS-0042)	1
20	O-RING	*	1071690 (ORB-112)	1
21	NUT	*	1074434 (426-U)	1
22	CAP	CAST BRASS	1074354 (426-CC)	1
<b>NORMALLY CLOSED MODEL</b>				
<b>LIMIT STOP MODEL</b>				
23	PIPE PLUG (1/4" N.P.T.)	PLATED STEEL	1071918 (PIZ-0008)	1
		BRASS	1071904 (PIB-0009)	1
		STN. STL.	1071915 (PIS-0010)	1
24	SHAFT (NORMALLY CLOSED)	*	1074402 (426-LL)	1
<b>SPRING ASSIST CLOSED MODEL</b>				
25	CENTERING WASHER	BRASS	1074083 (421-AH)	1
		STN. STL.	1074084 (421-AHS)	1
		BRASS	1074430 (426-TT)	1
26	RETAINER NUT	STN. STL.	1074433 (426-TT)	1
27	PIPE PLUG (1/8" N.P.T.)	PLATED STEEL	1071917 (PIZ-0005)	1
		BRASS	1071903 (PIB-0007)	1
		STN. STL.	1071916 (PIS-0002)	1
28	SPRING	*	1074428 (426-SS)	1
29	O-RING	*	1071677 (ORB-025)	1
30	CAP	CAST IRON	1074352 (426-CC)	1
		CAST BRASS	1074353 (426-CCB)	1
<b>SPRING ASSIST OPEN MODEL</b>				
8	GASKET	COOPER	1074262 (424-R)	1
		LEAD	1074263 (424-RL)	1
31	SPRING	*	1074423 (426-S)	1
32	CENTERING WASHER	BRASS	1074436 (426-V)	1
		STN. STL.	1074437 (426-VS)	1
<b>POSITION INDICATOR MODEL</b>				
33	CAP	CAST IRON	1074360 (426-CF)	1
		CAST BRASS	1074364 (426-CFB)	1
34	O-RING	*	1071692 (ORB-116)	1
35	SHAFT GUIDE BUSHING	*	1074121 (421-GF)	1
36	INDICATOR SHAFT	*	1074325 (425-FM)	1
37	O-RING	*	1071688 (ORB-108T)	1
38	TOP NUT	*	1074332 (425-TB)	1
39	LOCKWASHER	*	1073590 (WAS-0007)	1

## VALVOLE IN GHISA 3" / 3" METAL DIAPHRAGM VALVES

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**NORMALLY OPEN (STANDARD)**

INCHES  
MILLIMETERS

**REPAIR PARTS KITS**

DESCRIPTION	PART NO.
DIAPHRAGM & SEALS KIT CONSISTS OF ITEM NO'S 3(2), 5, 6, 8(2), 9, 14, 16	1070072 (427-R), 1070085 (427-4E), 1070097 (427-4M)
INT. PARTS KIT (NORM. OPEN) CONSISTS OF STANDARD ITEM NO'S 4, 7, 10, 11(2), 17, 18	1070122 (427-RF)
SEAT (ITEM NO. 2)	1074505 (427-MO)

**ASSEMBLY TOOLS**

DESCRIPTION	PART NO.
FOR INSTALLATION & REMOVAL OF SHAFT	1-3/16" HEX SOCKET

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

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

7.500 DIA. B.C.  
7.500 DIA. X THRU (4) HOLES

**METRIC FLANGE PER BS4504, DIN 10 & ISO R 2084**

190 MM DIA. B.C.  
18 MM DIA. X THRU (8) HOLES

NO.	DESCRIPTION	STD.	PART NO.	QTY.
1	CAST IRON BODY	THREADED FLANGED	1074448 (427-4S)	1
2	CAST BRASS SEAT	THREADED	1074449 (427-4S)	1
3	HEX LOCK NUT (5/16-24)	BRASS	1074507 (427-MO)	1
4	DISC PLATE	BRASS	1074493 (427-K)	1
5	O-RING	BRASS	1074495 (427-K)	1
6	DISC	HYCAR	1074492 (427-M)	1
7	DISC HOLDER	BRASS	1074485 (427-H)	1
8	GASKET	COPPER LEAD	1074263 (424-R)	2
9	O-RING	BRASS	1074487 (427-J)	1
10	SHAFT GUIDE (RECS ASSY TOOL)	BRASS	1074481 (427-G)	1
11	DIAPHRAGM PLATE	BRASS	1074471 (427-D)	2
12	CAP	CAST IRON	1074474 (427-C)	1
13	HEX SCREW	CAST BRASS	1074457 (427-3B)	6
14	DIAPHRAGM	BRASS	1074475 (427-TB)	1
15	HEX NUT	PLATED STEEL	1074688 (427-F)	6
16	O-RING	BRASS	1074496 (427-L)	1
17	SHAFT (NORMALLY OPEN)	BRASS	1074382 (428-1A)	1
18	DISC SPACER	BRASS	1074384 (428-1A)	1
19	HEX SCREW	STN. STL.	1072399 (S3-0020)	2

VALVULE IN GHISA 3" / 3" METAL DIAPHRAGM VALVES

USED WITH NORMALLY CLOSED VALVES ONLY (1/8" NPT)

1073045 (V42-0010-00000) (THREADED)  
1073103 (V42-3010-00000) (FLANGED)

**LIMIT STOP**  
(1/4" NPT)  
(1/8" NPT)

(1/4" NPT)

1073055 (V42-0030-00000) (THREADED)  
1073113 (V42-3030-00000) (FLANGED)

**NORMALLY CLOSED**

USED WITH NORMALLY CLOSED VALVES ONLY (1/8" NPT)

1073047 (V42-0002-00000) (THREADED)  
1073100 (V42-3002-00000) (FLANGED)

**SPRING ASSIST CLOSED**

USED WITH NORMALLY CLOSED VALVES ONLY (1/8" NPT)

1073045 (V42-0010-00000) (THREADED)  
1073103 (V42-3010-00000) (FLANGED)

**LIMIT STOP**  
(1/4" NPT)  
(1/8" NPT)

(1/4" NPT)

1073055 (V42-0030-00000) (THREADED)  
1073113 (V42-3030-00000) (FLANGED)

**NORMALLY CLOSED**

USED WITH NORMALLY CLOSED VALVES ONLY (1/8" NPT)

1073047 (V42-0002-00000) (THREADED)  
1073100 (V42-3002-00000) (FLANGED)

**SPRING ASSIST CLOSED**

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

NO.	DESCRIPTION	STD.	PART NO.	QTY.
<b>LIMIT STOP MODEL</b>				
20	SCREW	*	1072365 (SS-0043)	1
21	O-RING	*	1071690 (08B-112)	1
22	NUT	*	1074434 (426-U)	1
23	CAP	*	1074462 (427-C03) CAST BRASS (1074463 (427-C03B))	1
<b>NORMALLY CLOSED MODEL</b>				
24	PIPE PLUG (1/4" N.P.T.)		PLATED STEEL * 1071918 (91Z-0089) BRASS 1071904 (91B-0089) STN. STL. 1071915 (91S-0001)	1
25	SHAFT (NORMALLY CLOSED)	*	1074493 (427-L)	1
<b>SPRING ASSIST CLOSED MODEL</b>				
26	CENTERING WASHER	BRASS *	1074083 (421-AH)	1
27	RETAINER NUT	BRASS *	1074430 (426-T) STN. STL. 1074433 (426-TS)	1
28	PIPE PLUG (1/8" N.P.T.)		PLATED STEEL * 1071917 (91Z-0085) BRASS 1071903 (91B-0087) STN. STL. 1071916 (91S-0002)	1
29	SPRING	*	1074428 (426-S)	1
30	O-RING	*	1071677 (08B-029)	1
31	CAP	CAST BRASS	1074460 (427-C0) 1074461 (427-C0B)	1
<b>SPRING ASSIST OPEN MODEL</b>				
8	GASKET	COPPER *	1074292 (424-R)	1
32	SPRING	LEAD	1074283 (424-RL)	1
33	CENTERING WASHER	BRASS *	1074423 (426-S) 1074436 (426-V) STN. STL. 1074437 (426-VS)	1
<b>POSITION INDICATOR MODEL</b>				
34	CAP	CAST IRON *	1074468 (427-C7)	1
35	O-RING	CAST BRASS	1074469 (427-C8)	1
36	SHAFT GUIDE BUSHING	*	1071692 (08B-116)	1
37	INDICATOR SHAFT	*	1074421 (421-B7) 1074510 (421-9H)	1
38	O-RING	*	1071688 (08B-108C)	1
39	TOP NUT	*	1074332 (425-TB)	1
40	LOCKWASHER	*	1073990 (9MS-0007)	1

**CONVERSION KITS**

DESCRIPTION	PART NO.
CONVERSION KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 20,21,22,23	1074502 (427-L5C)
CONVERSION KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 26 THRU 31	1074519 (427-SCC)
CONVERSION KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 8,32,33	1074521 (427-SO)
CONVERSION KIT (POSITION INDICATOR) CONSISTS OF STANDARD ITEM NO'S 34 THRU 40	1074509 (427-PIC)

**POSITION INDICATOR**

DESCRIPTION	PART NO.
INT. PARTS KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 20,21,22	1074501 (427-L5)
INT. PARTS KIT (NORM. CLOSED) ITEM NO'S 4,7,10,11(2),18,25	1070133 (427-RG)
INT. PARTS KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 26,29,30	1081565 (427-SC)
INT. PARTS KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 8,32,33	1074521 (427-SO)
INT. PARTS KIT (POSITION INDICATOR) CONSISTS OF STD ITEM NO'S 35 THRU 40	1074508 (427-PI)

**REPAIR PARTS KITS**

DESCRIPTION	PART NO.
INT. PARTS KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 20,21,22	1074501 (427-L5)
INT. PARTS KIT (NORM. CLOSED) ITEM NO'S 4,7,10,11(2),18,25	1070133 (427-RG)
INT. PARTS KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 26,29,30	1081565 (427-SC)
INT. PARTS KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 8,32,33	1074521 (427-SO)
INT. PARTS KIT (POSITION INDICATOR) CONSISTS OF STD ITEM NO'S 35 THRU 40	1074508 (427-PI)

## VALVE IN GHISA 4" / 4" METAL DIAPHRAGM VALVES

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1/4"-18 N.P.T. PORT "D"

1/4"-18 N.P.T. PORT "C"

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

INCHES  
MILLIMETERS

REPAIR PARTS KITS			
DESCRIPTION	PART NO.	DESCRIPTION	PART NO.
DIAPHRAGM & SEALS KIT CONSISTS OF ITEM NOS 3(2),5,6,8(2),9,14,16	1070073 (428-R)	BUNA N INCLUDES DIAPHRAGM	1070068 (428-MAO)
INT. PARTS KIT (NORM. OPEN) CONSISTS OF STANDARD ITEM NOS 4,7,10,11(2),17,18,19	1070123 (428-RF)	E.P.D.M. INCLUDES DIAPHRAGM	1070598 (428-IV)
SEAT (ITEM NO. 2)	1074585 (428-MAO)	FKM INCLUDES DIAPHRAGM	1074598 (428-IV)

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

FLANGE STYLE	A	B	C
AMERICAN	8.000	7.500	7.50
METRIC	229 MM	180 MM	18 MM

NO.	DESCRIPTION	STD	PART NO.	QTY.
1	BODY	CAST IRON	1074522 (428-A)	1
2	SEAT	BRASS	1074585 (428-MAO)	1
3	HEX LOCK NUT (3/8-24)	STN. STL.	1074586 (428-MAO)	1
4	DISC PLATE	BRASS	1074574 (428-A)	2
5	O-RING	BUNA N	1074576 (428-MA)	1
6	DISC	E.P.D.M.	1071728 (08E-156)	1
7	DISC HOLDER	HYCAR	1074571 (428-MA)	1
8	GASKET	BRASS	1074587 (428-N)	1
9	O-RING	COOPER	1073950 (200-1L)	2
10	SHAFT GUIDE	LEAD	1073951 (200-1L)	2
11	DIAPHRAGM PLATE	BRASS	1074553 (428-DA)	1
12	GAP	CAST IRON	1074552 (428-C)	1
13	HEX SCREW	PLATED STEEL	1072406 (S2-0027)	11
14	DIAPHRAGM	STN. STL.	1072391 (S3-0154)	11
15	HEX NUT	BUNA N	1074557 (428-IV)	1
16	O-RING	PLATED STEEL	1074559 (428-IV)	1
17	SHAFT (NORMALLY OPEN)	BRASS	1071688 (N2-0014)	11
18	DISC SPACER	STN. STL.	1071682 (N5-0014)	11
19	LOCKWASHER	BRASS	1071702 (08E-210C)	1
		FKM	1071744 (08E-210)	1
		E.P.D.M.	1071815 (08E-210)	1
		BRASS	1074565 (428-MA)	1
		STN. STL.	1074566 (428-MA)	1
		STN. STL.	1074591 (M5-0030)	2

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VALVULE IN GHISA 4" / 4" METAL DIAPHRAGM VALVES

1073151 (V42K-3010-00000)

**LIMIT STOP**

(1/4" NPT)  
(1/8" NPT)

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**

1073148 (V42K-3002-00000)

**SPRING ASSIST CLOSED**

**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.

**CONVERSION KITS**

DESCRIPTION	PART NO.
CONVERSION KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 20,21,22,23	1074584 (428-LS)
CONVERSION KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 26 THRU 31	1074603 (428-SC)
CONVERSION KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 8,32,33,34	1074606 (428-SOC)
CONVERSION KIT (POSITION INDICATOR) CONSISTS OF STANDARD ITEM NO'S 35 THRU 40	1074592 (428-PI)

**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)

**LIMIT STOP MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY.
20	SCREW	*	107356 (S5-004)	1
21	O-RING	*	107190 (088-112)	1
22	NUT	*	107434 (428-U)	1
23	CAP	*	107452 (428-CC)	1

**NORMALLY CLOSED MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY.
24	PIPE PLUG (1/4" N.P.T.)	*	1071918 (P2-0008)	1
			1071904 (P8-0009)	
			1071915 (P5-0001)	
25	SHAFT (NORMALLY CLOSED)	*	107450 (428-L)	1

**SPRING ASSIST CLOSED MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY.
26	CENTERING WASHER	*	1074530 (428-W)	1
			BRASS	
			STN. STL.	
27	RETAINER NUT	*	1074430 (428-T)	1
			BRASS	
			STN. STL.	
28	PIPE PLUG (1/8" N.P.T.)	*	1071917 (P2-0009)	1
			PLATED STEEL	
			BRASS	
			STN. STL.	
29	SPRING	*	1071916 (P5-0002)	1
			1074607 (428-S)	
30	O-RING	*	107187 (088-025)	1
31	CAP	*	107450 (428-CC)	1

**SPRING ASSIST OPEN MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY.
B	GASKET	*	107390 (200-L)	1
			COPPER	
			LEAD	
32	SPRING	*	1074600 (428-S)	1
			BRASS	
33	CENTERING WASHER	*	1074510 (428-V)	1
			STN. STL.	
			BRASS	
34	SHAFT GUIDE	*	107452 (428-030)	1
			STN. STL.	

**POSITION INDICATOR MODEL**

NO.	DESCRIPTION	STD	PART NO.	QTY.
35	CAP	*	107459 (428-C)	1
			CAST IRON	
36	O-RING	*	107192 (088-118)	1
37	SHAFT GUIDE BUSHING	*	107412 (421-97)	1
38	INDICATOR SHAFT	*	107453 (428-P)	1
			107188 (088-100C)	
39	O-RING	*	107188 (088-100C)	1
40	TOP NUT	*	1074608 (428-18)	1

## VALVOLE IN GHISA 6" / 6" METAL DIAPHRAGM VALVES

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1073176 (V42L-3000-00000) (6" PIPE SIZE)  
**NORMALLY OPEN (STANDARD)**

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

**REPAIR PARTS KITS**

DESCRIPTION	PART NO.
DIAPHRAGM & SEALS KIT CONSISTS OF ITEM NOS 2,5(2),8,10(2),11,14,19,23,24(2)	107074 (429-RA) 107089 (429-BA) BUENA N FKM INCLUDES DIAPHRAGM
INT. PARTS KIT (NORM. OPEN) CONSISTS OF STANDARD ITEM NOS 4,(12),6,7,9,12,16(2),18,22	1074653 (429-RF)
SEAT ITEM NO. 3,4(Ø)	1074640 (429-MO)

NOTE:  
1. AMERICAN NATIONAL STANDARD TAPER PIPE THREADS (NPT) PER ANSI B2.1-1968

FLANGE STYLE	A	B	C
AMERICAN	11.000	9.500	.875
METRIC	279 MM	240 MM	22 MM

NO.	DESCRIPTION	STD.	PART NO.	QTY.
1	BODY	CAST IRON	1074613 (429-A)	1
2	SEAT GASKET	BUENA N	1074642 (429-N)	1
3	SEAT	BRASS	1074643 (429-NV)	1
4	HEX SCREW (5/16-18X3/4)	BRASS	1074640 (429-MO)	1
5	HEX LOCK NUT	BRASS	1072355 (SS-0011)	20
6	DISC SPACER	BRASS	1071654 (NUS-0025)	2
7	DISC PLATE	BRASS	1074628 (429-HA)	1
8	DISC	BUENA N	1074631 (429-J)	1
		FKM	1074633 (429-JV)	1
		HYCAR	1074632 (429-JH)	1
9	DISC HOLDER	BRASS	1074627 (429-H)	1
10	GASKET	LEAD	1073952 (201-M)	2
11	CENTERING PLATE	BUENA N	1074644 (429-O)	1
		FKM	1074645 (429-OV)	1
12	CENTERING PLATE	CAST IRON	1074625 (429-GO)	1
13	HEX NUT	PLATED STEEL	1071659 (NUT-0021)	16
14	DIAPHRAGM	BUENA N	1074622 (429-FB)	1
		FKM	1074623 (429-FV)	1
15	HEX SCREW	PLATED STEEL	1072410 (SCZ-0036)	16
16	DIAPHRAGM PLATE	BRASS	1074620 (429-D)	2
17	CAP	CAST IRON	1074615 (429-C)	1
18	SHAFT (NORMALLY OPEN)	BUENA N	1074636 (429-L)	1
		FKM	1074637 (429-LV)	1
19	O-RING	BUENA N	1074661 (429-VP)	1
		E.P.D.M.	1071746 (ORV-214)	1
20	AUXILIARY PILOT VALVE (SEE SHEET V429-1B)	FKM	1071817 (ORV-214)	1
21	HEX NIPPLE	BRASS	1081648 (510-CM)	1
22	SHAFT GUIDE	BRASS	1074646 (429-P)	1
		BUENA N	1071703 (ORB-223)	1
23	O-RING	BUENA N	1071820 (ORV-223)	1
		FKM	1073592 (NMS-0011)	2
24	LOCKWASHER			

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VALVULE IN GHISA 6" / 6" METAL DIAPHRAGM VALVES

1073184 (V42L-3010-00000)

**LIMIT STOP**

1073187 (V42L-3030-00000)

**NORMALLY CLOSED**

V42L-3002-00000

**SPRING ASSIST CLOSED**

THIS 3-WAY "NORMALLY CLOSED" AUXILIARY PILOT VALVE (PART NO. 429-VP) IS FURNISHED WITH ALL V42L DIAPHRAGM VALVES. IT ACCELERATES THE CLOSING AND OPENING SPEED OF THE VALVE.

(FROM SHT 429-1F)

**POSITION INDICATOR**

V42L-3020-00000

**CONVERSION KITS**

DESCRIPTION	PART NO.
CONVERSION KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 25,26,27,29	1074639 (429-LS)
CONVERSION KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 31 THRU 36	1074656 (429-SC)
CONVERSION KIT (POSITION INDICATOR) CONSISTS OF STANDARD ITEM NO'S 37 THRU 42	1074648 (429-PI)

**REPAIR PARTS KITS**

DESCRIPTION	PART NO.
INT. PARTS KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 25,26,27	1074638 (429-LS)
INT. PARTS KIT (NORM. CLOSED) CONSISTS OF STANDARD ITEM NO'S 4,1(2),5,7,9,12,16(2),22,30	1074654 (429-RG)
INT. PARTS KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 31,34,35	1074655 (429-SC)
INT. PARTS KIT (POSITION INDICATOR) CONSISTS OF STD ITEM NO'S 37 THRU 42	1074647 (429-PI)

NO.	DESCRIPTION	STD	PART NO.	QTY.
<b>LIMIT STOP MODEL</b>				
25	SCREW	*	1074680 (429-U)	1
26	O-RING	*	1071990 (08B-12)	1
27	NUT	*	1074434 (428-U)	1
28	CAP	*	1074617 (429-CC)	1
<b>NORMALLY CLOSED MODEL</b>				
29	PIPE PLUG (1/4" N.P.T.)	*	1071916 (07Z-008)	1
			1071904 (08B-008)	
			1071916 (01S-001)	
30	SHAFT (NORMALLY CLOSED)	*	1073837 (429-L)	1
<b>SPRING ASSIST CLOSED MODEL</b>				
31	CENTERING NUT	*	1074683 (429-X)	1
32	RETAINER NUT	*	1074689 (429-T)	1
			1071917 (04Z-006)	
33	PIPE PLUG (1/8" N.P.T.)	*	1071903 (08B-007)	1
			1071916 (01S-002)	
34	SPRING	*	1074687 (429-S)	1
			1073838 (08B-222)	
35	O-RING	*	1073838 (08B-222)	1
36	CAP	*	1074616 (429-CC)	1
<b>POSITION INDICATOR MODEL</b>				
37	CAP	*	1074618 (429-C)	1
38	O-RING	*	1071694 (08B-128)	1
39	SHAFT GUIDE BUSHING	*	1074624 (429-G)	1
40	INDICATOR SHAFT	*	1074649 (429-N)	1
41	O-RING	*	1071888 (08B-180C)	1
42	TOP NUT	*	1074688 (429-B)	1

NOTE:

1. SPRING ASSIST CLOSED MODEL CANNOT BE COMBINED WITH LIMIT STOP OR POSITION INDICATOR MODELS.
2. SPRING ASSIST OPEN MODEL NOT AVAILABLE.