



# AQMATIC

## Valves & Controls

### V42 SERIES METAL DIAPHRAGM VALVE MASTER CHART

\* FILL IN PROPER DESIGNATIONS TO DETERMINE PRODUCT NUMBER: **V 4 2**

PIPE SIZE (B thru L std)	
B = 3/4" (20mm)	G = 2" (50mm - V426)
C = 1" (25mm)	H = 2-1/2" (63mm)
D = 1-1/4" (32mm)	J = 3" (75 or 80mm)
E = 1-1/2" (40mm)	K = 4" (100mm)
F = 2" (50mm - V425)	L = 6" (150mm)

BODY SIZE (ref only)	
1 = 1"	7 = 3"
4 = 1-1/2"	8 = 4"
5 = 2"	9 = 6"
6 = 2-1/2"	

END CONNECTIONS (0 std for V421, V424, V425, V426 & V427; 3 std for V428 & V429)		
(BSP threads not available on Brass valves)		
0 = Female N.P.T.	3 = Flanged, A.S.T.M.	5 = Grooved Per ANSI/AWWA C606 (see note 3)
1 = Female B.S.P.T. (Tapered)	4 = Flanged, I.S.O. (Not valid on V429 valves)	

BODY & CAP MATERIAL (0 std [opt 1 not available with flanged bodies])	
0 = Cast Iron - RED primer	D = Cast Iron - painted BLUE
1 = Cast Brass	

VALVE OPTIONS (00 std [SAO not available on V429]; [NC not valid with solenoid or float configurations])		
00 = NO	11 = NO, LS, SAO	30 = NC
01 = NO, SAO	21 = NO, PI, SAO	32 = NC, SAC
02 = NO, SAC		40 = NC, LS
10 = NO, LS		SX = Special Valve **

SEAL MATERIALS (0 std) (Option 5 not valid for NC valves or solenoid EO or EC valves)						
OPT.	OPERATING DIAPHRAGM	SEALING DISK	DYNAMIC SEALS	STATIC SEALS	KIT SERIES	Max Temp
0	Buna-N	Buna-N	Buna-N	Buna-N	RA	150° (65°C)
1	Buna-N	EP	EP	EP	RAE	200° (93°C)
2	Fluoroelast.	Fluoroelast.	Fluoroelast.	Fluoroelast.	RAV	250° (121°C)
4	Fluoroelast.	EP	EP	EP	RAEFV	200° (93°C)
5	Buna-N	Fluoroelast.	Fluoroelast.	Fluoroelast.	RAVFB	200° (93°C)
7	Buna-N	Hycar	Buna-N	Buna-N	RAJH	150° (65°C)

INTERNAL PARTS
0 = Brass and Stainless Steel

DRILL & TAP BOSSES (0 std [1/4" NPT std for all sizes]) (See notes 1 & 2)			
0 = None	4 = Boss #4	8 = Bosses #2,4	
1 = Boss #1	5 = Bosses #1,2,3,4	A = Bosses #2,3	
2 = Boss #2	6 = Bosses #1,2		
3 = Boss #3	7 = Bosses #1,3		

SOLENOID or FLOAT OPTIONS (0 std) (Options 1 thru 5 and A thru X are not valid with NC valves)				
0 = None				
See valve options # -3				
Solenoid Options		Float Options		
1 = Energize to Open (EO)	A = 3000 Float	Closed If	Close By	Open By
2 = Energize to Close (EC)	B = 3010 Float	High	Pilot Press.	Vent
3 = Independent Pressure (IP)	C = 3011 Float	Low	Pilot Press.	Pilot Press.
4 = EO w/ Dry Drain	D = 3012 Float	Low	Pilot Press.	Pilot Press.
5 = EC w/ Dry Drain	E = 3010B Brine Float	High	Pilot Press.	Pilot Press.
	X = Replacement Valve Only (Includes Shaft Spacer)			

SOLENOID or FLOAT FEATURES (0 std)	
0 = None	
Solenoid Option Features	Float Option Features
1 = 115V/60 HZ, NEMA 1	0 = 36" Brass Float Rod
2 = 220V/50 HZ, NEMA 1	N = 54" Brass Float Rod
3 = 24V/60 HZ, NEMA 1	X = Less Float & Rod
A = 24VDC	

\* To create a valve number replace each "..." with the proper number or letter for the feature you desire. For example, a 3/4" NPT Cast Iron Valve Model V421 with Normally Closed and Spring Assist Closed Options is designated as a V42B-0032-00000.

\*\* A special valve will have a custom drawing number (.....) and the item number format is (V42?-??SX-.....) where the last 5 numbers (Far Right) are the last five digits of the drawing number.

- Valve Option Notes:
- Bosses #1, 2, 3, & 4, are always drilled and tapped on V429 and does not need to be specified in part no.
  - Bosses needing to be drilled and tapped for solenoid or floats do not need to be specified in part no.
  - Grooved End option only available on 2" 425 & 3" 427 Cast Iron valves.

REV.	ECO. NO.	DESCRIPTION	BY/DATE
N	1405	REMOVED ASH PAINT OPTION "C"	JJJ
P	1501	Corrected Solenoid Options	JJJ
Q	1778	ADDED OPTION 5 (END CONNECTORS)	MM 11/4/2020
R		TAKE OUT TEXT FOR VALVE OPTION 3-FLOAT OPTION NA	MM 05/19/2021
S	2177	BRANDING UPDATE	JJJ 01/02/2023