

# **General Service Solenoid Valves**

Brass or Stainless Steel Bodies 1/8" to 3/8" NPT



#### **Features**

- Welded core tube provides higher pressure ratings
- Reliable, proven design with high flows
- Small poppet valves for tight shutoff
- Wide range of elastomers for specialty service applications
- Mountable in any position
- Tapped mounting holes in body standard

#### Construction

Valve Parts in Contact with Fluids										
Body	Brass	Cast 304 Stainless Steel								
Seals and Discs	NBR or Cast UR									
Core Tube	305 Stainless Steel									
Core and Plugnut	430F Stainless Steel									
Springs	302 Stainless Steel									
Shading Coil	Copper	Silver								

#### **Electrical**

		Rating and Consumptio	n				
		AC		General	Purpose	Explosi	onproof
DC Watts	Watts	VA Holding	VA Inrush	AC	DC	AC	DC
10.6	6.1*	16	30	238210	238510	238214	238514
18.6	9.1*	20	45	238210	238510	238214	238514
11.6	10.1	25	50	238610	238910	238614	238914
22.6	17.1	40	70	238610	238910	238614	238914

Standard Voltages: 24, 120, 240, 480 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz). 6, 12, 24, 120, 240 volts DC. Must be specified when ordering. Other voltages available when required.

#### **Solenoid Enclosures**

Standard: Watertight, Types 1, 2, 3, 3S, 4, and 4X.

**Optional:** Explosionproof and Watertight, Types 3, 3S, 4, 4X, 6, 6P, 7, and 9.

(To order, add prefix "EF" to catalog number)

See Optional Features Section for other available options.

#### **Options**

Mounting bracket (suffix MB)

Quarter-turn manual operator with screw slot (suffix MS)

Panel mount (prefix GP for conduit; consult ASCO for other electrical connections) Vacuum service (suffix VVM, VVH; see Vacuum Section for more details.)

Oxygen service (suffix N) Silicone Free (suffix SF)

10.1, 17.1, 11.6, and 22.6 watt coils).

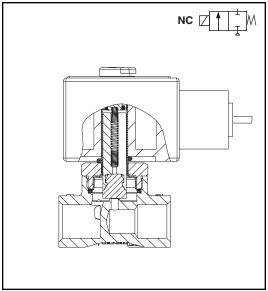
**Elastomers:** FKM (suffix V), Ethylene Propylene (suffix E), CR (suffix J), PTFE\* (suffix T), Low Temp NBR\*\* (suffix A)

**Note:** \*PTFE reduces pressure rating by 25% (i.e. 750 psi reduced to 560 psi)

\*\* For Low Temp. NBR, fluid temperature range is -40°F to 167°F (only for valves with

Refer to Engineering Section for fluid and temperature compatibility.





# **Nominal Ambient Temp. Ranges**

The nominal limitation of 32°F (0°C) is advisable for any valve that might contain moisture (water vapor).

AC: -13°F to 131°F (-25°C to 55°C)

DC: -13°F to 104°F (-25°C to 40°C)

-13°F to 131°F (-25°C to 55°C)

Note: Max ambient for explosionproof (EF) is 125°F (52°C) for AC, 131°F (55°C) for DC.

Optional: For AC, the max. ambient temperature is 140°F (60°C) with Class H coil (with or without prefix EF) *Refer to Engineering Section for details*.

#### **Approvals**

CSA certified. UL listed, as indicated. Safety Shutoff Valves FM approved. Meets applicable CE directives. *Refer to Engineering Section for details.* 

 $<sup>^{*}</sup>$ On 50 hertz service, the rating for the 6.1/F solenoid is 8.1 watts, and the rating for the 9.1/F solenoid is 11.1 watts.

# **AZCO**®

# **Specifications (English units)**

				Operating Pressure Differential (psi)							Max. Fluid		Catalog	Catalog Number			Watt Rating/ Class of Coil				
Pipe	Orifice	Cv		x. AC@1		_	x. DC@1			c. DC@13			p. °F								lation
Size (in)	size (in)	Flow Factor	Air-Inert Gas	Water ②	Lt. Oil @ 300ssu	Air-Inert Gas	Water ②	Lt. Oil @ 300ssu	Air-Inert Gas	Water ②	Lt. Oil 300ssu	AC	DC	Brass	Stainless Steel	Const. Ref.	UL Listing	AC	DC		
	ALLY CI				energized			300380	uas		วบบรรน	AU	DU	Diass	Sicci	nei.	Listing	AU	_ DC		
	1/8 3/64 0.06 2200 2200 1700 140 8262H175 ⊕ 1 ● 10.1/F -																				
1/8	3/64	0.06	-	-	-	2000	2000	1725	1900	1900	1700	-	140	-	8262H176 ①	1	•	-	22.6/H		
1/8	3/64	0.06	-	-	-	1500	1500	1500	1500	1500	1500	-	140	8262H089 ①	-	1	•	-	22.6/H		
1/8	3/64	0.06	2025	1710	825	965	745	720	920	700	675	140	140	-	8262H079 ①	2	•	9.1/F	18.6/H		
1/8	3/64	0.06	1500	1350	825	750	620	565	700	565	530	140	140	8262H096 ①	-	2	•	6.1/F	10.6/H		
1/8	3/64	0.06	1500	1350	825	-	-	- 045	-	-	-	140	-	-	8262H173 ①	2	•	6.1/F	-		
1/8	3/64	0.06	1500 750	1500 750	1500 725	1170 750	1145 640	945 550	1000 750	965 600	855 500	140 180	140 180	8262H099 ① 8262H001	- 8262H012	1 2	0	10.1/F 6.1/F	11.6/H 10.6/H		
1/8	3/32	0.00	720	410	410	610	410	410	600	410	400	180	180	8262H277	8262H178	1	0	17.1/F	22.6/H		
1/8	3/32	0.21	-	-	-	290	290	270	240	240	255	180	180	-	8262H177	1	0	-	11.6/H		
1/8	3/32	0.21	500	350	325	295	210	205	285	200	195	180	180	8262H011	-	2	0	9.1/F	18.6/H		
1/8	3/32	0.21	370	330	190	235	160	160	215	150	145	180	180	8262H014	8262H015	2	0	6.1/F	10.6/H		
1/8	1/8	0.35	500	380	355	275	275	235	250	250	225	180	180	8262H105	8262H174	1	0	17.1/F	22.6/H		
1/8	1/8	0.35	340	300	215	-	-	-	-	-	-	-	180	-	8262H179	1	0	10.1/F	-		
1/8	1/8	0.35	275	260	195	165	130	130	155	120	120	180	180	8262H016	-	2	)	9.1/F	18.6/H		
1/8	1/8	0.35	185 2200	180	120	130	110	95	120	100	90 855	180 140	180 140	8262H002	8262H006	2	0	6.1/F	10.6/H 11.6/H		
1/4	3/64 3/64	0.06	1500	2200 1500	1700 1500	1170 1170	1145 1145	945 945	1000	965 965	855	140	140	8262H200 ①	8262H214 ①	3		10.1/F 10.1/F	11.6/H		
1/4	3/64	0.06	1500	1500	1500	1500	1500	1500	1500	1500	1500	140	140	8262H107 ①	-	3	•	17.1/F	22.6/H		
1/4	3/64	0.06	-	-	-	2000	2000	1725	1900	1900	1700	-	140	-	8262H181 ①	3	•	-	22.6/H		
1/4	3/64	0.06	1500	1350	825	750	620	530	700	565	495	140	140	8262H106 ①	8262H180 ①	4	•	6.1/F	10.6/H		
1/4	3/64	0.06	750	750	725	750	640	550	750	600	500	180	180	8262H019	8262H080	4	0	6.1/F	10.6/H		
1/4	3/32	0.21	720	410	410	610	410	410	600	410	400	180	180	8262H109	8262H183	3	)	17.1/F	22.6/H		
1/4	3/32	0.21	590	410	410	290	290	270	240	240	225	180	180	8262H108	8262H182	3	)	10.1/F	11.6/H		
1/4	3/32	0.21	500	350	270	295	210	205	285	200	195	180	180	8262H021	-	4	)	9.1/F	18.6/H		
1/4	3/32 1/8	0.21	370 500	330 380	160 355	235 275	160 275	160 235	215 250	150 250	145 225	180 180	180 180	8262H020 8262H110	8262H086 8262H185	4	0	6.1/F	10.6/H 22.6/H		
1/4	1/8	0.35	340	300	215	130	125	115	110	105	100	180	180	8262H110	02020100	3	0	17.1/F 10.1/F	11.6/H		
1/4	1/8	0.35	340	300	215	-	-	-	-	-	-	180	-	-	8262H184	3	0	10.1/F	-		
1/4	1/8	0.35	275	260	150	165	130	120	155	120	115	180	180	8262H023	-	4	0	9.1/F	18.6/H		
1/4	1/8	0.35	185	180	90	130	110	90	120	100	85	180	180	8262H022	8262H007	4	0	6.1/F	10.6/H		
1/4	5/32	0.52	300	210	210	135	135	135	115	115	115	180	180	8262H112	8262H187	3	0	17.1/F	22.6/H		
1/4	5/32	0.52	210	200	145	65	63	63	55	54	54	180	180	8262H202	-	3	0	10.1/F	11.6/H		
1/4	5/32	0.52	210	200	145	-	-	-	-	-	-	180	180	-	8262H220	3	0	10.1/F	-		
1/4	5/32 5/32	0.52	150 100	140 100	100 55	95 72	75 60	75 55	85 67	72 53	70 52	180 180	180 180	8262H113	-	4	0	9.1/F	18.6/H 10.6/H		
1/4	7/32	0.52	125	125	125	70	70	70	65	65	65	180	180	8262H111 8262H114	8262H186 8262H188	3	0	6.1/F 17.1/F	22.6/H		
1/4	7/32	0.73	100	100	100	35	35	35	30	30	30	180	180	8262H208	-	3	0	10.1/F	11.6/H		
1/4	7/32	0.73	100	100	100	-	-	-	-	-	-	180	-	-	8262H226	3	5	10.1/F	-		
1/4	7/32	0.73	55	54	40	38	33	31	35	30	28	180	180	8262H013	8262H036	4	0	6.1/F	10.6/H		
1/4	9/32	0.88	90	90	90	53	50	47	48	46	44	180	180	8262H212	8262H230	3	0	17.1/F	22.6/H		
1/4	9/32	0.88	65	75	60	25	25	22	22	22	20	180	180	8262H210	-	3	0	10.1/F	11.6/H		
1/4	9/32	0.88	65	75	60	-	-	-	-	-	-	180	-	-	8262H189	3	0	10.1/F	-		
1/4	9/32	0.88	36	36	33	27	23	21	24	22	20	180	180	8262H090	8262H038	4	0	6.1/F	10.6/H		
3/8	1/8 1/8	0.35	500 340	380 300	355 215	275 130	275 125	160 85	250 110	250 105	150 75	180 180	180 180	8263H115 8263H232	8263H191 -	5 5	0	17.1/F 10.1/F	22.6/H 11.6/H		
3/8	1/8	0.35	340	300	215	-	-	- 00	-	-	-	180	-	0203FIZ3Z -	8263H190	5	0	10.1/F	11.0/H		
3/8	1/8	0.35	275	260	140	165	130	110	155	120	105	180	180	8263H003	-	6	0	9.1/F	18.6/H		
3/8	1/8	0.35	185	180	90	130	110	80	120	100	75	180	180	8263H002	8263H330	6	0	6.1/F	10.6/H		
3/8	5/32	0.52	300	210	195	135	135	100	115	115	90	180	180	8263H118	8263H193	5	0	17.1/F	22.6/H		
3/8	5/32	0.52	210	185	100	65	63	50	55	54	44	180	180	8263H200	-	5	0	10.1/F	11.6/H		
3/8	5/32	0.52	210	185	100	-	-	-	-	-	-	180	-	-	8263H331	5	0	10.1/F	-		
3/8	5/32	0.52	150	140	80	95	75	75	85	72	70	180	180	8263H117		6	0	9.1/F	18.6/H		
3/8	5/32 7/32	0.52	100 125	100	50 100	72 70	60 70	55 70	67 65	53 65	52 65	180 180	180 180	8263H116 8263H206	8263H192 8263H332	6 5	0	6.1/F 17.1/F	10.6/H 22.6/H		
3/8	7/32	0.73	100	86	70	35	35	35	30	30	30	180	180	8263H206 8263H124	- 0200N332	5	0	17.1/F 10.1/F	11.6/H		
3/8	7/32	0.73	100	86	70	-	-	-	-	-	-	180	-	-	8263H195	5	0	10.1/F	-		
3/8	7/32	0.73	55	54	29	38	33	31	35	30	28	180	180	8263H119	8263H194	6	0	6.1/F	10.6/H		
3/8	9/32	0.88	100	85	70	53	50	47	48	46	44	180	180	8263H210	8263H333	5	0	17.1/F			
3/8	9/32	0.88	65	63	47	-	-	-	-	-	-	180	180	8263H125	8263H197	5	0	10.1/F	-		
	9/32	0.88	35	32	21	27	23	21	24	22	20	180	180	8263H054	8263H196	6	0	6.1/F	10.6/H		



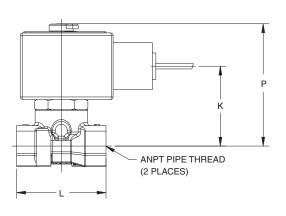
# **Specifications (Metric units)**

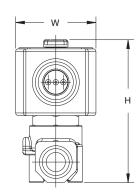
					Oper	ating Pre	ssure Dif	ferential (b	ar)			N/	Fluid	Catalog	Number			Watt Rating/ Class of Coil		
Pipe	Orifice	Kv Flow	М	ax. AC@5	55°C	М	ax. DC@	40°C	Ma	x. DC@5	5°C		Fluid p. °C						of Coll lation	
Size	size	Factor	Air-Inert		Lt. Oil @	Air-Inert	Water	Lt. Oil @	Air-Inert	Water	Lt. Oil			,	Stainless	Const.	UL		- DO	
(in)	(mm) ALLY CI	(m³/h)	Gas (Closed)	when de-	300ssu energized)	Gas NRR Di	© SC	300ssu	Gas	2	300ssu	AC	DC	Brass	Steel	Ref.	Listing	AC	DC	
1/8	1.2	0.05	152	152	117	-	-	-	T -	-	-	60	T -	I -	8262H175 ①	1	•	10.1/F	-	
1/8	1.2	0.05	-	-	-	138	138	119	131	131	117	-	60	-	8262H176 ①	1	•	-	22.6/H	
1/8	1.2	0.05	-	-	-	103	103	103	103	103	103	-	60	8262H089 ①	-	1	•	-	22.6/H	
1/8	1.2	0.05	140	118	57	67	51	50	63	48	47	60	60	-	8262H079 ①	2	•	9.1/F	18.6/H	
1/8	1.2	0.05	103	93	57	52	43	39	48	39	37	60	60	8262H096 ①	-	2	•	6.1/F	10.6/H	
1/8	1.2	0.05	103	93	57	-	-	-	-	-	-	60	-	-	8262H173 ①	2	•	6.1/F	-	
1/8	1.2	0.05	103	103	103	81	79	65	69	67	59	60	60	8262H099 ①	-	1	•	10.1/F	11.6/H	
1/8	1.2	0.05	52	52	50	52	44	38	52	41	34	82	82	8262H001	8262H012	2	0	6.1/F	10.6/H	
1/8	2.4	0.18	50 -	28	28	42 20	28 20	28 19	41 17	28 17	28 18	82	82 82	8262H277	8262H178 8262H177	1	0	17.1/F	22.6/H 11.6/H	
1/8	2.4	0.18	34	24	- 22	20	14	19	20	14	13	82	82	8262H011	0202H177	2	0	- 9.1/F	18.6/H	
1/8	2.4	0.18	26	23	13	16	11	11	15	10	10	82	82	8262H014	8262H015	2	0	9.1/F 6.1/F	10.6/H	
1/8	3.2	0.10	34	26	24	19	19	16	17	17	16	82	82	8262H105	8262H174	1	0	17.1/F	22.6/H	
1/8	3.2	0.30	23	21	15	-	-	-		-	-	82	-	-	8262H179	<del>'</del>	0	10.1/F	-	
1/8	3.2	0.30	19	18	13	11	9	9	11	8	8	82	82	8262H016	-	2	0	9.1/F	18.6/H	
1/8	3.2	0.30	13	12	8	9	8	7	8	7	6	82	82	8262H002	8262H006	2	0	6.1/F	10.6/H	
1/4	1.2	0.05	152	152	117	81	79	65	69	67	59	60	60	-	8262H214 ①	3	•	10.1/F	11.6/H	
1/4	1.2	0.05	103	103	103	81	79	65	69	67	59	60	60	8262H200 ①	-	3	•	10.1/F	11.6/H	
1/4	1.2	0.05	103	103	103	103	103	103	103	103	103	60	60	8262H107 ①	-	3	•	17.1/F	22.6/H	
1/4	1.2	0.05	-	-	-	138	138	119	131	131	117	-	60	-	8262H181 ①	3	•	ı	22.6/H	
1/4	1.2	0.05	103	93	57	52	43	37	48	39	34	60	60	8262H106 ①	8262H180 ①	4	•	6.1/F	10.6/H	
1/4	1.2	0.05	52	52	50	52	44	38	52	41	34	82	82	8262H019	8262H080	4	0	6.1/F	10.6/H	
1/4	2.4	0.18	50	28	28	42	28	28	41	28	28	82	82	8262H109	8262H183	3	)	17.1/F	22.6/H	
1/4	2.4	0.18	41	28	28	20	20	19	17	17	16	82	82	8262H108	8262H182	3	0	10.1/F	11.6/H	
1/4	2.4	0.18	34	24	19	20	14	14	20	14	13	82	82	8262H021	-	4	0	9.1/F	18.6/H	
1/4	2.4 3.2	0.18	26 34	23 26	11 24	16 19	11 19	11 16	15 17	10 17	10 16	82 82	82 82	8262H020 8262H110	8262H086 8262H185	3	0	6.1/F 17.1/F	10.6/H 22.6/H	
1/4	3.2	0.30	23	20	15	9	9	8	8	7	7	82	82	8262H232	02020100	3	0	17.1/F 10.1/F	11.6/H	
1/4	3.2	0.30	23	21	15	-	-	-	-	-	-	82	-	020211232	8262H184	3	0	10.1/F	11.0/11	
1/4	3.2	0.30	19	18	10	11	9	8	11	8	8	82	82	8262H023		4	0	9.1/F	18.6/H	
1/4	3.2	0.30	13	12	6	9	8	6	8	7	6	82	82	8262H022	8262H007	4	0	6.1/F	10.6/H	
1/4	4.0	0.45	21	14	14	9	9	9	8	8	8	82	82	8262H112	8262H187	3	0	17.1/F	22.6/H	
1/4	4.0	0.45	14	14	10	4	4	4	4	4	4	82	82	8262H202	-	3	0	10.1/F	11.6/H	
1/4	4.0	0.45	14	14	10	-	-	-	-	-	-	82	-	-	8262H220	3	0	10.1/F	-	
1/4	4.0	0.45	10	10	7	7	5	5	6	5	5	82	82	8262H113	-	4	0	9.1/F	18.6/H	
1/4	4.0	0.45	7	7	4	5	4	4	5	4	4	82	82	8262H111	8262H186	4	0	6.1/F	10.6/H	
1/4	5.6	0.63	9	9	9	5	5	5	4	4	4	82	82	8262H114	8262H188	3	0	17.1/F	22.6/H	
1/4	5.6	0.63	7	7	7	2	2	2	2	2	2	82	82	8262H208	-	3	0	10.1/F	11.6/H	
1/4	5.6	0.63	7	7	7	-	-	-	-	-	-	82	-	-	8262H226	3	)	10.1/F	-	
1/4	5.6	0.63	4	4	3	3	2	2	2	2	2	82	82	8262H013	8262H036	4	)	6.1/F	10.6/H	
1/4	7.1	0.76	6	6	6	4 2	3	3	3	3	3	82	82	8262H212	8262H230	3	0	17.1/F	22.6/H	
1/4	7.1	0.76	4	5	4	2	2	2	2	12		82 82	82	8262H210	- 8262H189	3	0	10.1/F	11.6/H	
1/4	7.1 7.1	0.76 0.76	2	5 2	2	2	2	1	2	2	1	82	82	8262H090	8262H189 8262H038	4	0	10.1/F 6.1/F	- 10.6/H	
3/8	3.2	0.76	34	26	24	19	21	11	17	19	10	82	82	8263H115	8263H191	5	0	17.1/F		
3/8	3.2	0.30	23	21	15	9	9	6	8	7	5	82	82	8263H232	-	5	0	17.1/F		
3/8	3.2	0.30	23	21	15	-	-	-	-	-	-	82	82	-	8263H190	5	0	10.1/F	-	
3/8	3.2	0.30	19	18	10	11	9	8	11	8	7	82	82	8263H003	-	6	0	9.1/F	18.6/H	
3/8	3.2	0.30	13	12	6	9	8	6	8	7	5	82	82	8263H002	8263H330	6	0	6.1/F	10.6/H	
3/8	4.0	0.45	21	14	13	9	9	7	8	8	6	82	82	8263H118	8263H193	5	0	17.1/F		
3/8	4.0	0.45	14	13	7	4	4	3	4	4	3	82	82	8263H200	-	5	О	10.1/F	11.6/H	
3/8	4.0	0.45	14	13	7	-	-	-	-	-	-	82	-	-	8263H331	5	0	10.1/F	-	
3/8	4.0	0.45	10	10	6	7	5	5	6	5	5	82	82	8263H117	-	6	0	9.1/F	18.6/H	
3/8	4.0	0.45	7	7	3	5	4	4	5	4	4	82	82	8263H116	8263H192	6	0	6.1/F	10.6/H	
3/8	5.6	0.63	9	7	7	5	5	5	4	4	4	82	82	8263H206	8263H332	5	0	17.1/F		
3/8	5.6	0.63	7	6	5	2	2	2	2	2	2	82	82	8263H124	-	5	0	10.1/F	11.6/H	
3/8	5.6	0.63	7	6	5	-	-	-	-	-	-	82	-	-	8263H195	5	0	10.1/F	-	
3/8	5.6	0.63	4	4	2	3	2	2	2	2	2	82	82	8263H119	8263H194	6	)	6.1/F	10.6/H	
3/8	7.1	0.76	7	6	5	4	3	3	3	3	3	82	82	8263H210	8263H333	5	0	17.1/F		
3/8	7.1	0.76	4	4	3	-	-	-	-	-	-	82	-	8263H125	8263H197	5	0	10.1/F	10.0/11	
3/8	7.1	0.76	2	2	1	2	2	1	2	2	1	82	82	8263H054	8263H196	6	0	6.1/F	10.6/H	

## **Dimensions: inches (mm)**

Const. Ref.		Н	K	L	P	w
1	ins	3.05	1.71	1.19	2.69	1.95
'	mm	77	43	30	68	50
2	ins	2.85	1.60	1.19	2.50	1.69
	mm	72	41	30	63	43
3	ins	3.12	1.79	1.56	2.76	1.95
l °	mm	79	45	40	70	50
4	ins	2.96	1.72	1.56	2.60	1.69
4	mm	75	44	40	66	43
5	ins	3.20	1.79	1.88	2.77	1.95
3	mm	81	45	48	70	50
	ins	3.03	1.72	1.88	2.60	1.69
6	mm	77	44	48	66	43

Const. Ref. 1-6



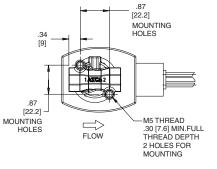


### **Mounting Dimensions**

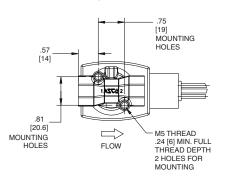
Const. Ref. 1, 2

(1/8" Pipe)

Const. Ref. 3, 4 (1/4" Pipe)



## Const. Ref. 5, 6 (3/8" Pipe)



Note: Mounting holes will accept a standard #10-32 machine screw.