

We stock more than 2,000 different ASCO solenoid valves, repair kits, and replacement coils. What we don't stock, we can usually get from the factory within 5 working days! As the local authorized ASCO distributor, we work closely with the factory to get you exactly what you need, when you need it most.

New from ASCO! Need to reduce inventory and costs? Take a look at the Next Generation solenoid valves. Three power ranges fit most applications, and the new design runs smoother, quieter, and with only a two-watt power draw!

Due to manufacturer agreements, not all products are available in all geographic areas and markets.

Prices Start at See Page

Prices in this catalog are current at the publication date, and are subject to change without notice.

Two-Way Valves

Aluminum Body Solenoid Valves 8040/8215 Series	\$72.00	399
Dust Collector Solenoid Valves 8353 Series	\$67.00	408
Fuel Oil Solenoid Valves 8262/8266 Series	\$52.00	409
Gas Safety Shutoff Valves 8214 Series	\$334.00	411
General Service Brass Solenoid Valves 8210 Series	\$101.00	400
High Pressure Solenoid Valves 8223 Series	\$204.00	404
Hot Water and Steam Solenoid Valves 8210/8220/8263 Series	\$138.00	401
Lead-Free Composite Body Solenoid Valves 212 Series	\$130.00	405
Low Power Consumption Solenoid Valves Next Generation Valves	\$107.00	395
Low Pressure Solenoid Valves 8030 Series	\$112.00	398
Miniature Solenoid Valves 8262 Series	\$48.00	402
Pilot-Operated, Slow-Closing Solenoid Valves 8221 Series	\$230.00	405
Severe Duty Piston Valves 8290 Series	\$185.00	406
Solenoid Valves for Combustion Systems	\$72.00	410
Sub-Miniature Solenoid Valves 8256/8356 Series	\$39.00	403

Three-Way Valves

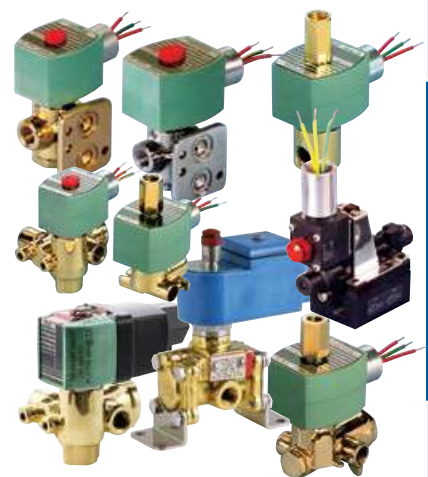
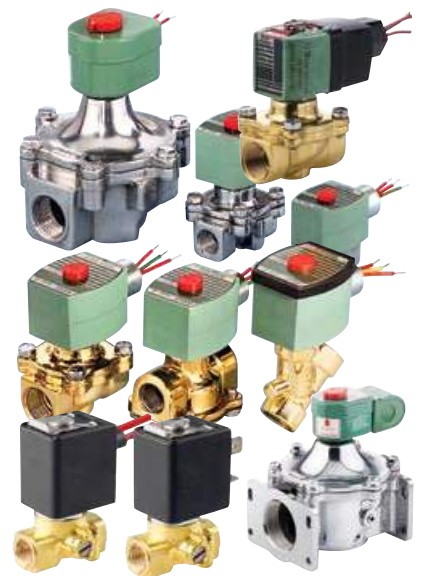
Air and Water Solenoid Valves 8316 Series	\$348.00	414
Direct-Mount Inline Spool Valves 8551 Series	\$122.00	416
General Service Solenoid Valves 8314 Series	\$129.00	412
General Service Solenoid Valves 8320 Series	\$87.00	413
Intrinsically Safe Solenoid Valves IS Series	\$487.00	417
Low Power Consumption Solenoid Valves Next Generation Valves	\$167.00	395
Pad Mount (Directly on Actuator) Solenoid Valves 8380/8401 Series	\$516.00	417
Quick Exhaust Solenoid Valves 8317/8321 Series	\$182.00	415
Sub-Miniature Solenoid Valves 8256/8356 Series	\$39.00	403

Four-Way Valves

Intrinsically Safe Solenoid Valves IS Series	\$487.00	417
General Service Solenoid Valves 8342 and 8344 Series	\$290.00	418
General Service Two-Position Solenoid Valves 8345 Series	\$244.00	419
Low Power Consumption Solenoid Valves Next Generation Valves	\$300.00	395

Accessories

Adjustable Electronic Timer	\$126.00	420
Adjustable Flow Control Valves	\$138.00	420
Exhaust Mufflers	\$6.00	420
Two-Way Strainers	\$55.00	420



Condensed Model Selection Guide



Pipe Size (In.)	Orifice Size (In.)	Cv Flow Factor	Operating Pressure Differential (PSI)									Max. Fluid Temp (°F)		Std. Solenoid Enclosure RedHat I: 1 RedHat II: 1-4, 3S, 4X	Materials		Watt Rating/ Class of Coil Insulation		Page No.
			Min. Press. Req'd	Maximum AC			Maximum DC			AC	DC	Body	Elastomer		AC	DC			
				Air/Inert Gas	Water	Light Oil 300SSU	Air/Inert Gas	Water	Light Oil 300SSU										
2-Way Normally Closed (Closed when de-energized)																			
1/8	3/64	0.06	0	750	750	530	650	640	550	180	120	8262H001	Brass	NBR	6.1/F	10.6/F	402		
1/8	3/32	0.20	0	275	290	130	150	140	145	180	120	8262H014	Brass	NBR	6.1/F	10.6/F	402		
1/8	1/8	0.34	0	155	180	140	80	80	80	200	120	8262H002	Brass	NBR	6.1/F	10.6/F	402		
1/4	3/64	0.06	0	750	750	500	500	500	500	180	120	8262H019	Brass	NBR	6.1/F	10.6/F	402		
1/4	3/32	0.17	0	360	340	160	150	125	125	180	120	8262H086	SS	NBR	6.1/F	10.6/F	402		
1/4	1/8	0.34	0	500	500	330	500	500	330	180	180	8262R232	Brass	Buna-N	2/H	2/H	396		
1/4	1/8	0.35	0	140	165	90	65	60	60	180	120	8262H022	Brass	NBR	6.1/F	10.6/F	402		
1/4	1/8	0.35	0	140	165	90	65	60	60	180	120	8262H007	SS	NBR	6.1/F	10.6/F	402		
1/4	1/8	0.35	0	300	300	200	75	70	70	180	150	8262H232	Brass	NBR	10.1/F	11.6/F	402		
1/4	5/32	0.47	0	290	250	250	290	250	250	180	180	8262R202	Brass	Buna-N	2/H	2/H	396		
1/4	5/32	0.47	0	290	250	250	290	250	250	180	180	8262R220	SS	Buna-N	2/H	2/H	396		
1/4	5/32	0.50	0	180	200	145	40	40	45	180	150	8262H202	Brass	NBR	10.1/F	11.6/F	402		
1/4	5/32	0.50	0	180	200	145	40	40	45	180	150	8262H220	SS	NBR	10.1/F	11.6/F	402		
1/4	5/32	0.52	0	110	110	—	—	—	—	210	210	8263H300	Brass	Teflon	10.1/H	—	401		
1/4	7/32	0.85	0	40	50	40	17	20	21	180	120	8262H013	Brass	NBR	6.1/F	10.6/F	402		
1/4	7.32	0.72	0	145	125	120	145	125	120	180	180	8262R208	Brass	Buna-N	2/H	2/H	396		
1/4	7.32	0.72	0	145	125	120	145	125	120	180	180	8262R226	SS	Buna-N	2/H	2/H	396		
1/4	7/32	0.72	0	90	100	100	25	25	25	180	150	8262H208	Brass	NBR	10.1/F	11.6/F	402		
1/4	7/32	0.72	0	90	100	100	25	25	25	180	150	8262H226	SS	NBR	10.1/F	11.6/F	402		
1/4	9/32	0.88	0	60	75	60	18	15	18	180	150	8262H210	Brass	NBR	10.1/F	11.6/F	402		
1/4	9/32	0.88	0	90	100	90	25	20	22	180	150	8262H212	Brass	NBR	17.1/F	22.6/F	402		
1/4	9/32	0.88	0	90	100	90	25	20	22	180	150	8262H230	SS	NBR	17.1/F	22.6/F	402		
1/4	9/32	0.96	0	90	85	80	90	85	80	180	180	8262R212	Brass	Buna-N	2/H	2/H	396		
1/4	9/32	0.96	0	90	85	80	90	85	80	180	180	8262R230	SS	Buna-N	2/H	2/H	396		
1/4	5/16	1.5	10	750	750	750	—	—	—	200	150	8223G021	Brass	Nylon	10.5/A	—	402		
1/4	5/16	1.5	10	1500	1500	1500	500	500	500	200	150	8223G025	Brass	Teflon	17.1/F	22.6/F	402		
1/4	5/16	1.5	10	1500	1500	1500	1500	1500	1500	180	180	8223P025	Brass	Buna-N	2/H	2/H	396		
1/4	3/8	1.1	0	15	—	—	—	—	—	125	—	8040H007	Alum	—	6.1/F	—	399		
3/8	1/8	0.35	0	160	150	90	65	60	60	180	120	8263H002	Brass	—	6.1/F	10.6/F	402		
3/8	5/32	0.52	0	150	150	100	150	150	100	180	180	8263R200	Brass	Buna-N	2/H	2/H	396		
3/8	5/32	0.52	0	—	110	—	—	—	—	7	—	8263H305	Brass	Teflon	10.1/H	—	401		
3/8	5/32	0.52	0	100	100	100	35	35	35	180	150	8263H200	Brass	—	10.1/F	11.6/F	402		
3/8	7/32	0.72	0	100	100	100	25	25	25	180	150	8263H206	Brass	—	17.1/F	11.6/F	402		
3/8	9/32	0.85	0	100	100	70	—	—	—	180	—	8263H210	Brass	—	17.1/F	—	402		
3/8	9/32	0.85	0	80	80	70	80	80	70	180	180	8263R210	Brass	Buna-N	2/H	2/H	396		
3/8	5/16	1.5	10	750	750	750	—	—	—	200	—	8223G023	Brass	Nylon	10.1/F	—	402		
3/8	5/16	1.5	10	1500	1500	1500	500	500	500	200	150	8223G027	Brass	Teflon	17.1/F	22.6/F	402		
3/8	5/16	1.5	10	1500	1500	1500	1500	1500	1500	180	180	8223P027	Brass	Buna-N	2/H	2/H	396		
3/8	3/8	1.8	0	7	5	—	3	3	—	180	120	8030G010	Brass	Buna-N	6.1/F	10.6/F	398		
3/8	3/8	1.2	0	15	—	—	—	—	—	125	—	8040H008	Alum	Buna-N	6.1/F	—	399		
3/8	3/8	1.8	0	15	15	—	3.5	3.5	—	180	150	8030G013	Brass	Buna-N	10.1/F	11.6/F	398		
3/8	3/8	1.5	4	150	125	—	40	40	—	180	150	8210G073	9	Brass	Buna-N	6.1/F	11.6/F	400	
3/8	5/8	3	0	150	150	—	150	150	—	180	180	8210P093	Brass	Buna-N	2/H	2/H	396		
3/8	5/8	3	0	150	150	—	40	40	—	180	150	8210G093	Brass	Buna-N	10.1/F	11.6/F	400		
3/8	5/8	3	1	—	100	—	—	40	—	210	150	8210G093HW	Brass	EthPro	10.1/F	11.6/F	401		
3/8	5/8	3	5	200	150	135	125	100	100	180	150	8210G001	Brass	Buna-N	6.1/F	11.6/F	400		
3/8	5/8	3	5	—	125	—	—	100	—	210	150	8210G001HW	Brass	EthPro	6.1/F	11.6/F	401		
3/8	5/8	3	5	300	300	300	—	—	—	175	—	8210G006	Brass	Buna-N	17.1/F	—	400		
3/8	3/4	3.4	0	50	—	—	25	—	—	125	104	8215G010	Alum	Buna-N	10.1/F	11.6/F	399		
1/2	3/8	3.2	25	1500	1500	1500	1500	1500	1500	180	180	8223P003	Brass	Buna-N	2/H	2/H	396		
1/2	3/8	3.2	25	1500	1500	1500	1500	1500	1500	180	180	8223P010	SS	Buna-N	2/H	2/H	396		
1/2	3/8	3.2	25	1500	1500	1500	500	500	500	200	150	8223G003	Brass	Nylon	17.1/F	22.6/F	402		
1/2	7/16	2.8	0	4	6	—	—	—	—	180	—	8030G016	Brass	Buna-N	6.1/F	—	398		
1/2	7/16	2.8	0	15	15	—	6	6	—	200	180	8030G017	Brass	Buna-N	15.4/F	16.8/F	398		
1/2	7/16	2.2	4	150	125	—	40	40	—	180	150	8210G015	Brass	Buna-N	6.1/F	11.6/F	400		
1/2	5/8	4	0	150	150	—	150	150	—	180	180	8210P094	Brass	Buna-N	2/H	2/H	396		
1/2	5/8	4	0	150	150	—	40	40	—	180	150	8210G094	Brass	Buna-N	10.1/F	11.6/F	400		
1/2	5/8	4	1	—	100	—	—	40	—	210	150	8210G094HW	Brass	EthPro	10.1/F	11.6/F	401		
1/2	5/8	4	5	200	150	135	125	100	100	180	150	8210G002	Brass	Buna-N	6.1/F	11.6/F	400		
1/2	5/8	4	5	—	125	—	—	100	—	210	150	8210G002HW	Brass	EthPro	6.1/F	11.6/F	401		
1/2	5/8	4	5	300	300	300	300	300	300	180	180	8210P007	Brass	Buna-N	2/H	2/H	396		
1/2	5/8	4	5	300	300	300	300	300	300	180	180	8210P087	SS	Buna-N	2/H	2/H	396		
1/2	5/8	4	5	300	300	300	—	—	—	175	—	8210G007	Brass	Buna-N	17.1/F	—	400		
1/2	1/8	4	5	2	—	—	—	—	—	4	—	8220G406	10	Brass	Teflon	10.1/H	—	401	
1/2	3/4	4.4	0	50	—	—	25	—	—	125	104	8215G020	Alum	Buna-N	10.1/F	11.6/F	399		
1/2	3/4	4.8	5	125	—	—	125	—	—	125	104	8215G002	Alum	Buna-N	6.1/F	11.6/F	399		

Rotary and Smart Actuator Motors

Instrument Valves

Process Control Accessories

Pressure and Temperature Switches

ASCO Solenoid Valves

Pressure Gauges

Pipe Size (In.)	Orifice Size (In.)	Cv Flow Factor	Operating Pressure Differential (PSI)									Max. Fluid Temp. (°F)		Std. Solenoid Enclosure RedHat I: 1 RedHat II: 1-4, 3S, 4X		Materials Body Elastomer		Watt Rating/ Class of Coil Insulation		Page No.
			Min. Press. Req'd	Maximum AC			Maximum DC													
				Air/Inert Gas	Water	Light Oil 300SSU	Air/Inert Gas	Water	Light Oil 300SSU	AC	DC									
2-Way Normally Closed (Continued)																				
3/4	5/8	4.5	0	150	150	125	150	150	125	180	180	8210P088	SS	Buna-N	2/H	2/H	396			
3/4	3/4	9.5	0	2	—	—	—	—	—	125	—	8040G023	Alum	Buna-N	10.1/F	—	399			
3/4	3/4	5	0	3	3	—	3	3	—	180	180	8030P003	Brass	Buna-N	2/H	2/H	396			
3/4	3/4	5	0	2	2	—	1	1	—	180	150	8030G003	Brass	Buna-N	10.1/F	11.6/F	398			
3/4	3/4	5	0	4	4	—	—	—	—	180	—	8030G043	Brass	Buna-N	17.1/F	—	398			
3/4	3/4	5.1	0	50	—	—	25	—	—	125	104	8215G030	Alum	Buna-N	10.1/F	11.6/F	399			
3/4	3/4	5	0	150	150	—	150	150	—	180	180	8210P095	Brass	Buna-N	2/H	2/H	396			
3/4	3/4	5	0	150	150	—	40	40	—	180	150	8210G095	Brass	Buna-N	10.1/F	11.6/F	400			
3/4	3/4	5	1	—	100	—	—	40	—	210	150	8210G095HW	Brass	EthPro	10.1/F	11.6/F	401			
3/4	3/4	5	5	150	150	125	100	90	75	180	150	8210G009	Brass	Buna-N	6.1/F	11.6/F	400			
3/4	3/4	5	5	—	125	—	—	100	—	210	150	8210G009HW	Brass	EthPro	6.1/F	11.6/F	401			
3/4	3/4	5	5.2	—	150	—	—	—	—	5	—	8220G409	10	Brass	Teflon	10.1/H	—	401		
3/4	3/4	6.5	5	250	150	100	125	125	125	180	150	8210G003	Brass	Buna-N	6.1/F	11.6/F	400			
3/4	3/4	6	0	350	300	200	200	180	180	200	77	8210G026	8	Brass	Teflon	15.4/F	30.6/H	400		
3/4	3/4	7.8	0	750	750	750	450	450	450	200	150	8223G005	Brass	Teflon	17.1/F	22.6/P	402			
3/4	3/4	7.8	25	750	750	750	750	750	750	180	180	8223P005	Brass	Buna-N	2/H	2/H	396			
1	1	13	0	150	125	125	100	100	80	180	77	8210G054	Brass	Buna-N	15.4/F	30.6/H	400			
1	1	13	5	150	150	100	150	150	100	180	180	8210P004	Brass	Buna-N	2/H	2/H	396			
1	1	13	5	150	150	100	125	125	125	180	150	8210G004	Brass	Buna-N	6.1/F	11.6/F	400			
1	1	13.5	0	300	225	115	—	—	—	200	—	8210G027	Brass	Buna-N	20/F	—	400			
1	1	13.5	5.3	—	150	—	—	—	—	6	—	8220G410	11	Brass	EthPro	10.1/F	—	401		
1	1	13.5	5.3	—	150	—	—	—	—	5	—	8220G411	10	Brass	Teflon	10.1/H	—	401		
1	1 5/8	21	0	25	—	—	25	—	—	125	77	8215B050	Alum	Buna-N	15.4/F	14.9/B	399			
1 1/4	1 1/8	15	0	150	125	125	100	100	80	180	77	8210G055	Brass	Buna-N	15.4/F	30.6/F	400			
1 1/4	1 1/8	15	5	150	150	100	150	150	100	180	180	8210P008	Brass	Buna-N	2/H	2/H	396			
1 1/4	1 1/8	15	5	150	150	100	125	125	125	180	150	8210G008	Brass	Buna-N	6.1/F	11.6/F	400			
1 1/4	1 1/8	15	5.3	—	150	—	—	—	—	6	—	8220G009	11	Brass	EthPro	10.1/F	—	401		
1 1/4	1 1/8	15	5.3	125	150	—	—	—	—	5	—	8220G027	10	Brass	Teflon	10.1/H	—	401		
1 1/4	1 1/8	32	0	25	—	—	25	—	—	125	77	8215B060	Alum	Buna-N	15.4/F	14.9/B	399			
1 1/2	1 1/4	22.5	0	150	125	125	100	100	80	180	77	8210G056	Brass	Buna-N	15.4/F	30.6/H	400			
1 1/2	1 1/4	22.5	5	150	150	100	150	150	100	180	180	8210P022	Brass	Buna-N	2/H	2/H	396			
1 1/2	1 1/4	22.5	5	150	150	100	125	125	125	180	150	8210G022	Brass	Buna-N	6.1/F	11.6/F	400			
1 1/2	1 1/4	22.5	5.3	—	150	—	—	—	—	6	—	8220G011	11	Brass	EthPro	10.1/F	—	401		
1 1/2	1 1/4	22.5	5.3	—	150	—	—	—	—	5	—	8220G029	10	Brass	Teflon	10.1/H	—	401		
1 1/2	1 5/8	35	0	25	—	—	25	—	—	125	77	8215B070	Alum	Buna-N	15.4/F	14.9/B	399			
2	1 3/4	43	5	150	125	90	150	125	90	180	180	8210P100	Brass	Buna-N	2/H	2/H	396			
2	1 3/4	43	5	150	125	90	50	50	50	180	150	8210G100	Brass	Buna-N	6.1/F	11.6/F	400			
2	2 3/32	60	0	25	—	—	15	—	—	125	77	8215B080	Alum	Buna-N	15.4/F	14.9/B	399			
2 1/2	3	117	0	5	—	—	—	—	—	125	—	8215A090	Alum	Buna-N	28.2/F	—	399			
3	3	138	0	5	—	—	—	—	—	125	—	8215A040	Alum	Buna-N	28.2/F	—	399			
2-Way Normally Open (Open when de-energized)																				
1/8	1/8	0.21	0	125	100	85	80	60	50	180	120	8262G031	Brass	Buna-N	6.1/F	10.6/F	402			
1/4	3/64	0.06	0	750	700	700	500	500	500	140	140	8262G260	12	Brass	Ureth	10.1/F	11.6/F	402		
1/4	3/32	0.17	0	300	250	230	300	250	230	180	180	8262P261	12	Brass	Ureth	2/H	2/H	396		
1/4	3/32	0.17	0	300	250	230	200	150	125	140	140	8262G261	12	Brass	Ureth	10.1/F	11.6/F	402		
1/4	1/8	0.35	0	130	110	100	130	110	100	180	180	8262P262	Brass	Buna-N	2/H	2/H	396			
1/4	1/8	0.35	0	130	110	100	80	60	60	180	150	8262G262	Brass	Buna-N	10.1/F	11.6/F	402			
1/4	5/32	0.49	0	85	75	60	85	75	60	180	180	8262P263	Brass	Buna-N	2/H	2/H	396			
1/4	5/32	0.49	0	85	75	60	45	30	30	180	150	8262G263	Brass	Buna-N	10.1/F	11.6/F	402			
1/4	7/32	0.83	0	45	45	40	25	20	20	180	150	8262G264	Brass	Buna-N	10.1/F	11.6/F	402			
1/4	9/32	0.96	0	30	20	20	30	20	20	180	180	8262P265	Brass	Buna-N	2/H	2/H	396			
1/4	9/32	0.96	0	30	25	20	15	15	15	180	150	8262G265	Brass	Buna-N	10.1/F	11.6/F	402			
3/8	3/8	1.6	0	15	15	—	2.4	2.4	—	200	180	8030G070	Brass	Buna-N	15.4/F	16.8/F	398			
3/8	5/8	3	0	150	150	125	125	125	80	180	150	8210P033	Brass	Buna-N	2/H	2/H	396			
3/8	5/8	3	0	150	150	125	125	125	80	180	150	8210G033	Brass	Buna-N	10.1/F	11.6/F	400			
1/2	7/16	2.2	0	15	15	—	2.5	2.5	—	200	180	8030G071	Brass	Buna-N	20/F	16.8/F	398			
1/2	5/8	4	0	150	150	125	150	150	125	180	180	8210P034	Brass	Buna-N	2/H	2/H	396			
1/2	5/8	4	0	150	150	125	125	125	80	180	150	8210G034	Brass	Buna-N	10.1/F	11.6/F	400			
1/2	3/4	5	0	2	2	—	—	—	—	180	—	8030G082	Brass	Buna-N	10.1/F	—	398			
1/2	3/4	4	0	125	—	—	125	—	—	125	104	8215G023	Alum	Buna-N	10.1/F	11.6/F	399			

Notes

- 1 AC model: 0 PSI; DC model: 1/4 PSI
- 2 Once opened at higher pressure, valve remains open to 0 PSI at inlet.
- 3 Once opened at higher pressure, valve remains open to 3 PSI at inlet.
- 4 5 PSI on air, 1 PSI on water.
- 5 210° F. for hot water, 353° F. for steam.
- 6 210° F. for hot water, 300° F. for steam.
- 7 210°F for hot water, 344°F for steam.
- 8 Valve provided with Teflon* seat.
- 9 Valve includes Ultem*** piston.
- 10 Valves with Teflon* discs are limited to 125 PSI max. and 353° F. max. saturated steam.
- 11 Valves with ethylene propylene discs are limited to 50 PSI max. and 300° F. max. saturated steam.
- 12 Cast urethane disc supplied as standard.

*DuPont Co. trademark

**GE Co. trademark

Condensed Model Selection Guide



Pipe Size (In.)	Orifice Size (In.)	Cv Flow Factor	Operating Pressure Differential (PSI)								Max. Fluid Temp. (°F)		Std. Solenoid Enclosure RedHat I: 1 RedHat II: 1-4, 3S, 4X	Materials		Watt Rating/ Class of Coil Insulation		Page No.
			Min. Press. Req'd	Maximum AC			Maximum DC											
				Air/Inert Gas	Water	Light Oil 300SSU	Air/Inert Gas	Water	Light Oil 300SSU									
2-Way Normally Open (Continued)																		
3/4	3/4	4.6	0	125	—	—	125	—	—	125	104	8215G033	Alum	Buna-N	10.1/F	11.6/F	399	
3/4	3/4	5.5	0	2	2	—	2	2	—	180	180	8030P083	Brass	Buna-N	2/H	2/H	396	
3/4	3/4	5.5	0	2	2	—	—	—	—	180	—	8030G083	Brass	Buna-N	10.1/F	—	398	
3/4	3/4	5.5	0	150	150	125	150	150	125	180	180	8210P035	Brass	Buna-N	2/H	2/H	396	
3/4	3/4	5.5	0	150	150	125	125	125	80	180	150	8210G035	Brass	Buna-N	10.1/F	11.6/F	400	
3/4	3/4	6.5	5	250	200	200	250	200	200	180	180	8210G013	Brass	Buna-N	15.4/F	16.8/F	400	
3/4	3/4	7.8	25	750	750	750	—	—	—	200	—	8223G005	Brass	Buna-N	17.1/F	22.6/F	404	
1	1	13	0	125	125	125	—	—	—	180	—	8210B057	Brass	Buna-N	20/F	—	400	
1	1	13	5	150	150	125	125	125	125	180	180	8210G014	Brass	Buna-N	15.4/F	16.8/F	400	
1	1 5/8	22	0	25	—	—	15	—	—	125	77	8215C053	Alum	Buna-N	15.4/F	14.9/B	399	
1 1/4	1 1/8	15	0	125	125	125	—	—	—	180	—	8210B058	Brass	Buna-N	20/F	—	400	
1 1/4	1 1/8	15	5	150	150	125	125	125	125	180	150	8210G018	Brass	Buna-N	15.4/F	16.8/F	400	
1 1/4	1 5/8	33	0	25	—	—	15	—	—	125	77	8215C063	Alum	Buna-N	15.4/F	14.9/B	399	
1 1/2	1 1/4	22.5	0	125	125	125	—	—	—	180	—	8210B059	Brass	Buna-N	20/F	—	400	
1 1/2	1 1/4	22.5	5	150	150	125	125	125	125	180	150	8210G032	Brass	Buna-N	15.4/F	16.8/F	400	
1 1/2	1 5/8	37	0	25	—	—	15	—	—	125	77	8215C073	Alum	Buna-N	15.4/F	14.9/B	399	
2	1 3/4	43	5	125	125	125	125	125	125	180	150	8210G103	Brass	Buna-N	15.4/F	16.8/F	400	
2	2 3/32	58	0	25	—	—	15	—	—	125	77	8215C083	Alum	Buna-N	15.4/F	14.9/B	399	

Pipe Size (In.)	Orifice Size (In.) ¹	Cv Flow Factor ¹	Operating Pressure Differential (PSI)								Max. Fluid Temp. (°F)		Std. Solenoid Enclosure RedHat I: 1 RedHat II: 1-4, 3S, 4X	Materials		Watt Rating/ Class of Coil Insulation		Page No.
			Min. Press. Req'd	Maximum AC			Maximum DC											
				Air/Inert Gas	Water	Lt. Oil 300 SSU ²	Air/Inert Gas	Water	Lt. Oil 300 SSU ²									
3-Way Normally Closed (Closed when de-energized)																		
1/8	3/64	0.06	0	200	200	200	200	200	200	180	120	8320G132	Brass	Buna-N	6.1/F	10.6/F	413	
1/8	1/16	0.09	0	150	125	125	125	125	125	180	120	8320G013	Brass	Buna-N	6.1/F	10.6/F	413	
1/8	3/32	0.12	0	100	100	100	100	100	100	180	120	8320G015	Brass	Buna-N	6.1/F	10.6/F	413	
1/8	1/8	0.21	0	40	40	40	40	40	40	180	120	8320G017	Brass	Buna-N	6.1/F	10.6/F	403	
1/4	1/16	0.09	0	210	225	225	160	160	160	200	150	8320G182	Brass	Buna-N	17.1/F	11.6/F	413	
1/4	5/64	0.12	0	232	232	232	232	232	232	180	180	8320P182	Brass	Buna-N	2/H	2/H	397	
1/4	3/32	0.12	0	150	150	150	115	115	115	200	150	8320G184	Brass	Buna-N	10.1/F	11.6/F	413	
1/4	3/32	0.17	0	205	205	205	205	205	205	180	180	8314R035	Brass	Buna-N	2/H	2/H	397	
1/4	3/32	0.17	0	205	205	205	205	205	205	180	180	8314R121	SS	Buna-N	2/H	2/H	397	
1/4	3/32	0.20	5	150	150	100	150	150	100	180	180	8317P035	Brass	Buna-N	2/H	2/H	397	
1/4	3/32 (1/4)	0.2 (.73)	5 3	150	—	—	—	—	—	180	—	8317G023	4	Brass	B/N/Neo	10.1/F	11.6/F	415
1/4	3/32 (1/4)	0.2 (.73)	5 3	150	150	95	75	55	30	180	104	8317G035	4	Brass	B/N/Neo	10.1/F	11.6/F	415
1/4	7/64	0.23	0	150	150	150	150	150	150	180	180	8320P184	Brass	Buna-N	2/H	2/H	397	
1/4	5/32	0.35	0	75	75	75	75	75	75	180	180	8320P186	Brass	Buna-N	2/H	2/H	397	
1/4	1/8	0.25	0	75	60	60	30	40	25	200	104	8314H036	Brass	Bun/Nyl	10.1/F	11.6/F	412	
1/4	1/8	0.25	0	85	85	85	60	60	60	200	150	8320G186	Brass	Buna-N	10.1/F	11.6/F	413	
1/4	1/8	0.27	0	145	145	145	145	145	145	180	180	8314R036	Brass	Buna-N	2/H	2/H	397	
1/4	11/64	0.35	0	45	45	45	25	25	25	200	150	8320G188	Brass	Buna-N	10.1/F	11.6/F	413	
1/4	9/32 (11/32)	0.8 (1.2)	10	200	200	200	200	200	200	180	120	8321G001	4	Brass	Buna-N	6.1/F	10.6/F	415
1/4	9/32	0.8	10	200	200	200	200	200	200	180	180	8321P001	Brass	Buna-N	2/H	2/H	397	
3/8	9/32 (11/32)	0.8 (1.2)	10	200	200	200	200	200	200	180	120	8321G002	4	Brass	Buna-N	6.1/F	10.6/F	415
3/8	9/32	0.8	10	200	200	200	200	200	200	180	180	8321P002	Brass	Buna-N	2/H	2/H	397	
3/8	5/8	2.5	10	250	250	—	250	250	—	180	180	8316P054	Brass	Buna-N	2/H	2/H	397	
3/8	5/8	3	10 5	150	125	—	125	125	—	180	120	8316G054	Brass	Buna-N	6.1/F	10.6/F	414	
3/8	5/8	3	10 5	250	250	—	250	250	—	180	120	8316G014	Brass	Buna-N	17.1/F	22.6/F	414	
1/2	5/8	3.2	10	250	250	—	250	250	—	180	180	8316P064	Brass	Buna-N	2/H	2/H	397	
1/2	5/8	4	10 5	150	125	—	125	125	—	180	120	8316G064	Brass	Buna-N	6.1/F	10.6/F	414	
1/2	5/8	4	10 5	250	250	—	250	250	—	180	120	8316G024	Brass	Buna-N	17.1/F	22.6/F	414	
3/4	11/16	4.8	10	250	250	—	250	250	—	180	180	8316P074	Brass	Buna-N	2/H	2/H	397	
3/4	11/16	5.5	10 5	150	125	—	125	125	—	180	120	8316G074	Brass	Buna-N	6.1/F	10.6/F	414	
3/4	11/16	5.5	10 5	250	250	—	250	250	—	180	120	8316G044	Brass	Buna-N	17.1/F	22.6/F	414	
1	1	13	10 5	150	125	—	125	125	—	180	120	8316G034	Brass	Buna-N	6.1/F	10.6/F	414	

Rotary and Smart Actuator Motors

Instrument Valves

Process Control Accessories

Pressure and Temperature Switches

ASCO Solenoid Valves

Pressure Gauges

Pipe Size (In.)	Orifice Size (In.) ¹	Cv Flow Factor ¹	Operating Pressure Differential (PSI)									Std. Solenoid Enclosure RedHat I: 1 RedHat II: 1-4, 3S, 4X		Materials Body Elastomer		Watt Rating/ Class of Coil Insulation AC DC		Page No.
			Min. Press. Req'd	Maximum AC			Maximum DC			Max. Fluid Temp. (°F)								
				Air/Inert Gas	Water	Lt. Oil 300 SSU ²	Air/Inert Gas	Water	Lt. Oil 300 SSU ²	AC	DC							
3-Way Normally Open (Open when de-energized)																		
1/8	3/64	0.06	0	200	200	200	200	200	200	180	120	8320G136	Brass	Buna-N	6.1/F	10.6/F	413	
1/8	3/32	0.12	0	100	100	100	100	100	100	180	120	8320G029	Brass	Buna-N	6.1/F	10.6/F	413	
1/4	1/16	0.09	0	235	250	250	160	160	160	200	150	8320G192	Brass	Buna-N	17.1/F	11.6/F	413	
1/4	5/64	0.12	0	210	210	210	210	210	210	180	180	8320P192	Brass	Buna-N	2/H	2/H	397	
1/4	3/32	0.12	0	150	140	140	100	100	100	200	150	8320G194	Brass	Buna-N	10.1/F	11.6/F	413	
1/4	3/32 (1/4)	0.15 (0.73)	5 3	160	160	95	75	45	25	180	104	8317G053 4	Brass	B/N/Neo	10.1/F	11.6/F	415	
1/4	7/64	0.23	0	150	150	150	150	150	150	180	180	8320P194	Brass	Buna-N	2/H	2/H	397	
1/4	11/64	0.35	0	40	40	40	30	30	30	200	150	8320G198	Brass	Buna-N	10.1/F	11.6/F	413	
1/4	9/32 (11/32)	0.80 (1.20)	10	200	200	200	200	200	200	180	120	8321G003 4	Brass	Buna-N	6.1/F	10.6/F	415	
3/8	9/32 (11/32)	0.80 (1.20)	10	200	200	200	200	200	200	180	120	8321G004 4	Brass	Buna-N	6.1/F	10.6/F	415	
3/8	5/8	3	10 5	150	125	—	125	125	—	180	120	8316G056	Brass	Buna-N	6.1/F	10.6/F	414	
3/8	5/8	3	10 5	250	250	—	250	250	—	180	120	8316G016	Brass	Buna-N	17.1/F	22.6/F	414	
1/2	5/8	4	10 5	150	125	—	125	125	—	180	120	8316G066	Brass	Buna-N	6.1/F	10.6/F	414	
1/2	5/8	4	10 5	250	250	—	250	250	—	180	120	8316G026	Brass	Buna-N	17.1/F	22.6/F	414	
3/4	11/16	5.5	10 5	150	125	—	125	125	—	180	120	8316G076	Brass	Buna-N	6.1/F	10.6/F	414	
3-Way Universal Operation																		
1/8	3/64	0.04	0	160	160	160	70	65	65	200	104	8314H041	Brass	Bun/Nyl	10.1/F	11.6/F	412	
1/8	3/64	0.06	0	175	175	175	125	125	125	140	120	8320G130	Brass	Ureth±	9.1/F	10.6/F	413	
1/8	3/32	0.12	0	50	50	50	50	50	50	180	120	8320G083	Brass	Buna-N	6.1/F	10.6/F	413	
1/8	1/8	0.21	0	30	30	30	20	20	20	180	120	8320G003	Brass	Buna-N	9.1/F	10.6/F	413	
1/8	1/16	0.09	0	100	100	100	65	65	65	180	120	8320G001	Brass	Buna-N	9.1/F	10.6/F	413	
1/4	3/64	0.04	0	160	160	160	70	65	65	200	104	8314H006	Brass	Bun/Nyl	10.1/F	11.6/F	412	
1/4	1/16	0.09	0	125	130	130	75	75	75	200	150	8320G172	Brass	Buna-N	10.1/F	11.6/F	413	
1/4	5/64	0.12	0	116	116	116	116	116	116	180	180	8320P172	Brass	Buna-N	2/H	2/H	397	
1/4	3/32	0.12	0	100	100	100	60	60	60	200	150	8320G174	Brass	Buna-N	17.1/F	11.6/F	413	
1/4	3/32	0.15	0	80	40	40	35	35	15	200	104	8314H007	Brass	Bun/Nyl	10.1/F	11.6/F	412	
1/4	3/32 (1/4)	0.20 (0.73)	5 3	80	50	50	40	30	15	180	104	8317G007 4	Brass	B/N/Neo	10.1/F	11.6/F	415	
1/4	7/64	0.23	0	60	60	60	60	60	60	180	180	8320P174	Brass	Buna-N	2/H	2/H	397	
1/4	1/8	0.25	0	45	25	25	20	15	15	200	104	8314H008	Brass	Bun/Nyl	10.1/F	11.6/F	412	
1/4	1/8	0.25	0	50	50	50	25	25	25	200	150	8320G176	Brass	Buna-N	17.1/F	11.6/F	413	
1/4	5/32	0.35	0	35	35	35	35	35	35	180	180	8320P176	Brass	Buna-N	2/H	2/H	397	
1/4	11/64	0.35	0	20	20	20	12	12	12	200	150	8320G178	Brass	Buna-N	10.1/F	11.6/F	413	
4-Way Valves																		
1/4	1/16	0.09	10	150	150	150	150	150	150	180	180	8345P001	Brass	Buna-N	2/H	2/H	397	
1/4	1/16 (3/32)	0.09	10	150	—	—	100	—	—	180	104	8345H003 2	Brass	Bun/Nyl	10.1/F	10.6/F	419	
1/4	1/16 (3/32)	0.09	10	150	150	150 4	100	100	100∅	180	104	8345G001 2	Brass	Bun/Nyl	10.1/F	10.6/F	419	
1/4	3/16	0.7	0	125	100	100	—	—	—	160	—	8342G001 2	Brass	Vit/Tef	20/F	—	418	
1/4	3/16	0.7	0	125	125	125	—	—	—	160	—	8342G020 3	Brass	Vit/Tef	15.4/F	—	418	
1/4	1/4	0.8 (1.0)	10	250	250	250	250	250	250	180	180	8344P070	Brass	Buna-N	2/H	2/H	397	
1/4	1/4	0.8 (1.0)	10 5	150	125	125	125	125	125	180	150	8344G070 2	Brass	Buna-N	10.1/F	11.6/F	418	
1/4	1/4	0.8 (1.0)	10 5	250 7	250 7	250 7	250 7	250 7	250 7	180	180	8344G000 2	Brass	Buna-N	17.1/F	22.6/F	418	
3/8	3/16	0.7	0	125	100	100	—	—	—	160	—	8342G003 2	Brass	Vit/Tef	20/F	—	418	
3/8	3/16	0.7	0	125	125	125	—	—	—	160	—	8342G022 3	Brass	Vit/Tef	15.4/F	—	418	
3/8	1/4	0.8 (1.0)	10 5	250 7	250 7	250 7	250 7	250 7	250 7	180	180	8344G001 2	Brass	Buna-N	17.1/F	22.6/F	418	
3/8	3/8	1.4 (2.2)	10 5	150	125	125	125	125	125	180	150	8344G072 2	Brass	Buna-N	10.1/F	11.6/F	418	
3/8	3/8	1.4 (2.2)	10	250	250	250	250	250	250	180	180	8344P072	Brass	Buna-N	2/H	2/H	405	
1/2	3/8	1.4 (2.2)	10 5	150	125	125	125	125	125	180	150	8344G074 2	Brass	Buna-N	10.1/F	11.6/F	418	
1/2	3/8	1.4 (2.2)	10	250	250	250	250	250	250	180	180	8344P074	Brass	Buna-N	2/H	2/H	397	
1/2	3/8	1.4 (2.2)	10 5	250 7	250 7	250 7	250 7	250 7	250 7	180	180	8344G027 2	Brass	Buna-N	17.1/F	22.6/F	418	
3/4	3/4	5.2 (5.6)	10 5	150	125	125	125	125	125	180	150	8344G076 2	Brass	Buna-N	10.1/F	11.6/F	418	
3/4	3/4	5.2 (5.6)	10	250	250	250	250	250	250	180	180	8344P076	Brass	Buna-N	2/H	2/H	405	
1	3/4	5.2 (5.6)	10	250	250	250	250	250	250	180	180	8344P078	Brass	Buna-N	2/H	2/H	405	

Notes

- 1 Exhaust orifice and Cv flow factors, when different from pressure specs, are listed in parentheses.
- 2 8314, 8317, 8325 ratings established with 45 SSU oil.
- 3 Minimum pressure differential on light oil is 10 PSI.
- 4 Quick exhaust construction.
- 5 Valve vents to 0 PSI.
- 6 Valve supplied with cast urethane disc.
- 7 For best results, do not use valve rated 250 PSI on mainline pressure of less than 125 PSI.

Key to Elastomer Abbreviations

- B/N/NEO – Buna-N, Nylon, Neoprene
- BUN/NYL – Buna-N, Nylon
- VIT/TEF – Viton™, Teflon™ (DuPont)
- URETH – Cast Urethane

Selecting the Right Valve

This catalog has been designed to make it easier to select and order the right valve for your application from the world's broadest line of solenoid valves.

The information you need to know to select a solenoid valve includes:

- **Type:** Two-way, three-way, four-way two-position, or four-way three-position blocked.
- **Operation:** Normally closed (closed when the coil is de-energized, open when energized), normally open (open when the coil is de-energized, closed when energized), or universal (three- and four-way valves only)
- **Media:** Air, water, light oil, steam, or other.
- **Size:** NPT threads, and gallons per hour, square cubic feet per hour (SCFH), pounds of steam per hour or flow coefficient (Cv).
- **Pressure:** Inlet maximum and minimum, or pressure drop.
- **Atmospheric Conditions:** Ambient temperatures, indoor/outdoor application, hazardous location, or hosedown environment.
- **Voltage:** Value (24, 120, or 240), AC (Hz) or DC.
- **Extra Options:** Special leads, manual operator, or other.

The condensed listing of valves on the following pages is

Don't see the valve you're looking for?



Give us a call...

With more than 20,000 variations available, we're sure to have the valve you need!!!

More than 20,000 types and sizes of ASCO valves are available to control many acids, alcohols, bases, solvents, corrosive gases, and liquids. Modified or special designs are sometimes required, depending upon the application.

Corrosion occurs either as a chemical or electrochemical reaction. Therefore, you need to consider both the galvanic and electromotive force series, as well as the pressure, temperature, and other factors that might be involved in your specific application.

General Information on Elastomer Materials

Buna-N: Commonly referred to as a nitrile rubber and ASCO's standard synthetic elastomer for accomplishing resilient-type seating or sealing. It has excellent compatibility for most air, water and light oil applications and has a useful temperature range of 0° to 180° F (-18° to 82° C).

Neoprene: Used principally as an external seal in refrigeration applications and for oxygen service as well. It has a useful temperature range of 0° to 180° F (-18° to 82° C).

Ethylene Propylene: Selected for applications above the Buna-N temperature range, such as handling hot water and steam. It has an extremely wide range of fluid compatibility but has the distinct advantage that it cannot be used with petroleum-based fluids or fluids so contaminated (such as lubricated air). It has a useful temperature range of -10° to 300° F (-23° to 149° C).

Viton*/Fluorel, etc.:** A fluorocarbon elastomer developed primarily for handling hydrocarbons, such as jet fuels, gasolines, solvent, etc., which normally caused detrimental swelling to Buna-N. Viton has a high temperature range similar to ethylene propylene but has the advantage of being somewhat more resistant to "dry heat." It has a rather wide range of chemical compatibility and a useful temperature range of 0° to 350° F (-18° to 177° C).

Teflon: Teflon and teflon with fillers are considered more of a plastic than a resilient-type material. They are virtually unattacked by any fluid. Their temperature usage has ranged from discs for cryogenic valves to discs for steam valves. They are not easily fabricated and are known to have "cold flow" characteristics that may contribute to objectionable leakage, particularly on gases.

*DuPont Co. trademark

**3M trademark

Low Power Consumption Solenoid Valves

Key Features

- DC coil pressures are increased to match AC ratings (up to a 500% improvement)
- Lower power operation — two watt power draw!
- Voltage ranging capabilities
- AC/DC interchangeability
- Eliminates AC hum — better design for quiet operation
- Longer coil life due to lower operating temperatures and built-in electrical surge suppression
- Internal stainless steel drive pins for support
- Standard Class H coils for ambient temperatures to 175°F
- New 24" lead lengths
- One-piece molded coil structure, two-piece welded core tube, and liquid crystal polymer (LCP) solenoid housing
- Steel and powder coated RedHat snap ring to hold the coil to the core tube for easier assembly and disassembly
- Solenoid approvals to UL, CSA, and CE standards
- Laser etched solenoid with AC/DC ratings, part number of the solenoid, and manufacturing code (traceability)

Specifications

Operating Pressure Differential: *Minimum:* Required to fully open the valve and keep it open. For 2-way valves with a floating diaphragm, the valve may start to close below the minimum pressure differential. For 3- and 4-way valves, the minimum differential is measured between the pressure and exhaust ports, and must be maintained to ensure complete transfer from one position to the other. *Maximum (MOPD):* The maximum difference in pressure between the inlet and outlet ports, against which the solenoid can safely operate the valve. If the pressure at the outlet is not known, it is safest to regard the supply pressure as the MOPD.

Note: Hung diaphragm constructions do not require a minimum pressure differential. However, they may not yield maximum flow rates at low-pressure differentials.

Ambient Temperature: *Minimum:* Nominal limitation of 32°F (0°C) is advisable for any valve that might contain moisture (water vapor). Where freezing water is not a factor, the minimum ambient temperature of these valves is 14°F (-10°C). Special constructions are available with low temperature elastomers to provide service at -40°F (-40°C) ambient temperatures. *Maximum:* The maximum ambient temperature is 140°F (60°C), based on continuous energizing with the maximum fluid temperatures as shown on each catalog page.

Viscosity: All valves with a pressure rating for light oil are designed for use with oils rated for a maximum of 300 SSU except Series 8314, 8317, 8321 (45 SSU) and Series 8345 (50 SSU)

Optional Manual Operators: Provided to operate the valves manually when electric actuation is not provided. There are two basic types of manual operators; momentary and maintained.

Electrical Specifications

Coil Version	Input Voltage	Minimum Voltage	Maximum Voltage	Peak Inrush Current	Average Holding Current	Average Holding Volt-Amps	Power Draw
12/24 DC	12	10.4	26.4	3.2 Amps	0.340 Amps	4.0 VA	2 Watts
	24	10.4	26.4	3.2 Amps	0.250 Amps	6.0 VA	2 Watts
24-99/DC (50-60 Hz)	24	20.4	109	1.4 Amps	0.170 Amps	4.0 VA	2 Watts
	99	20.4	109	1.4 Amps	0.100 Amps	10.0 VA	2 Watts
100-240/DC (50-60 Hz)	100	85	264	0.32 Amps	0.040 Amps	4.0 VA	2 Watts
	240	85	264	0.32 Amps	0.032 Amps	7.5 VA	2 Watts



Two-watt power draw lowers operating costs up to 14 percent!

Three voltage ranges fit almost any electrical requirement: 100-240 AC/DC, 24-99 AC/DC, and 12-24 DC

Built-in surge suppression protects the coil from voltage spikes!

Response Time: Response time from fully closed to fully open or vice versa depends on valve size, operating mode, fluids, temperature, inlet pressure, and pressure drop. *Small direct acting valves:* 10 to 60 msec; *Large direct acting valves:* 25 to 90 msec; *Internal pilot operated valves:* Small diaphragm types: 20 to 100 msec; Large diaphragm or small piston types: 80 to 150 msec; Large piston types: 105 to 200 msec; Operation on liquids has relatively little effect on small direct acting valves. Response times of large direct acting and internally piloted valves may be lengthened by 50% to 100%.

Approvals: UL, CSA, and CE listings are indicated on each series of valves in this catalog. Listing codes and other information follow in this section. *UL:* UL429, Electrically Operated Valves; *CSA:* Standard C22.2 No. 139, Electrically Operated Valves. covers the standards governing solenoid valves. *CE:* Machinery: 89/392/EEC; EMC (Electromagnetic Capability): 89/336/7EC; Low Voltage: 72/23/EEC; PED (Pressure Equipment Directive): 97/23/EC. General Purpose/Watertight coils each bear the CE approval mark on the coil.

Solenoid Recognized Components: Intended for use as factory-installed components of equipment where final acceptability must be determined by UL. Next Generation solenoids are listed in the UL recognized component index under Guide No. YSY12 for ordinary locations.

General Purpose Valves: Normally open or normally closed valves intended to control fluid flow, but not to be depended upon to act as safety valves.

Safety Shutoff Valves: Normally closed valves of the "on" and "off" type. Intended to be actuated by a safety control or emergency device to prevent unsafe fluid delivery. They may also be used as General Purpose valves. Multiple port valves may be designated as safety shutoff valves only with respect to the normally closed port.

See next two pages for model selection guides.

Low Power Consumption Solenoid Valves

2-Way Valves

- Two-way (2/2) Next Generation solenoid valves have one inlet port and one outlet port.
- Normally closed (opens when energized) and normally open operation.
- Three voltage ranges available: 100-240 VAC/VDC, 24-99 VAC/VDC, and 12-24 VDC

High pressure, low power consumption!



ASCO Next Generation solenoid valves provide lower operating cost without sacrificing the performance, reliability, and ruggedness that you have come to expect from ASCO. NextGen valves use electronics technology to manage power, providing a new standard of operation.

The solenoid incorporates a power management circuit providing lower power consumption, enhanced pressure and flow ratings, and electrical surge suppression to both the solenoid and electronic controls.

Stock models are available in all three voltage ranges.

Model Selection Guide

Specify voltage range: 100-240 VAC/VDC, 24-99 VAC/VDC, or 12-24 VDC

Material	Pipe Size (In)	Orifice Diam. (In)	Cv Flow Factor	Operating Pressure Differential (PSI)			Max. Fluid Temp.	UL	Wattage AC/DC	Catalog Number	Price	Rebuild Kit	Price	
				Min.	Air/Inert Gas	Water								Light Oil
Two-Way Solenoid Valve, General Service - Normally Closed (Opens when Energized)														
Brass	1/4	3/32	0.21	0	720	485	420	180°F	SSO	2	8262R109	\$107.00	—	—
Stainless	1/4	3/32	0.21	0	720	485	420	180°F	SSO	2	8262R183	161.00	—	—
Brass	1/4	1/8	0.35	0	500	500	330	180°F	SSO		8262R232	107.00	—	—
Stainless	1/4	1/8	0.35	0	500	500	330	180°F	SSO		8262R185	161.00	—	—
Brass	1/4	5/32	0.47	0	290	250	250	180°F	SSO	2	8262R202	107.00	—	—
Stainless	1/4	5/32	0.47	0	290	250	250	180°F	SSO	2	8262R220	161.00	—	—
Brass	1/4	7/32	0.72	0	145	125	120	180°F	SSO	2	8262R208	111.00	—	—
Stainless	1/4	7/32	0.72	0	145	125	120	180°F	SSO	2	8262R226	168.00	—	—
Brass	1/4	9/32	0.96	0	90	85	80	180°F	SSO	2	8262R212	128.00	—	—
Stainless	1/4	9/32	0.96	0	90	85	80	180°F	SSO	2	8262R230	175.00	—	—
Brass	1/4	5/16	1.5	10	1500	1500	1500	180°F	-	2	8223P025	324.00	322815	\$260.00
Brass	3/8	5/32	0.52	0	150	150	100	180°F	SSO	2	8263R200	153.00	—	—
Brass	3/8	9/32	0.85	0	80	80	70	180°F	SSO	2	8263R210	204.00	—	—
Brass	3/8	5/16	1.5	10	1500	1500	1500	180°F	-	2	8223P027	324.00	322815	260.00
Brass	3/8	5/8	3	0	150	150	-	180°F	SSO	2	8210P093	180.00	322670	146.00
Brass	1/2	3/8	3.2	25	1500	1500	1500	180°F	-	2	8223P003	574.00	322816	445.00
Stainless	1/2	3/8	3.2	25	1500	1500	1500	180°F	-	2	8223P010	940.00	322817	552.00
Brass	1/2	5/8	4	0	150	150	-	180°F	SSO	2	8210P094	180.00	322670	146.00
Brass	1/2	5/8	4	5	300	300	300	180°F	SSO	2	8210P007	213.00	322654	114.00
Stainless	1/2	5/8	4	0	150	150	125	180°F	GP	2	8210P087	629.00	322676	355.00
Stainless	3/4	5/8	4.5	0	150	150	125	180°F	GP	2	8210P088	637.00	322676	355.00
Brass	3/4	3/4	5	0	150	150	-	180°F	SSO	2	8210P095	191.00	322673	154.00
Brass	3/4	3/4	5	0	3	3	-	180°F	SSO	2	8030P003	242.00	—	—
Brass	3/4	3/4	7.8	25	750	750	750	180°F	-	2	8223P005	744.00	—	—
Brass	1	1	13	5	150	150	100	180°F	SSO	2	8210P004	278.00	322677	196.00
Brass	1 1/4	1 1/8	15	5	150	150	100	180°F	SSO	2	8210P008	334.00	322677	196.00
Brass	1 1/2	1 1/4	22.5	5	150	150	100	180°F	SSO	2	8210P022	487.00	322680	260.00
Brass	2	1 3/4	43	5	150	125	90	180°F	GP	2	8210P100	814.00	322682	494.00
Two-Way Solenoid Valve, General Service - Normally Open (Closed when Energized)														
Brass	1/4	3/32	0.17	0	300	250	230	180°F	GP	2	8262R261	161.00	322777	118.00
Brass	1/4	1/8	0.35	0	130	110	100	180°F	GP	2	8262R262	161.00	—	—
Brass	1/4	5/32	0.49	0	85	75	60	180°F	GP	2	8262R263	161.00	—	—
Brass	1/4	9/32	0.96	0	30	20	20	180°F	GP	2	8262R265	161.00	—	—
Brass	3/8	5/8	3	0	150	150	125	180°F	GP	2	8210P033	279.00	322770	185.00
Brass	1/2	5/8	4	0	150	150	125	180°F	GP	2	8210P034	279.00	322770	185.00
Brass	3/4	3/4	5.5	0	150	150	125	180°F	GP	2	8210P035	297.00	322771	209.00
Brass	3/4	3/4	5.5	0	2	2	-	180°F	GP	2	8030P083	251.00	—	—

SSO = Safety Shut-off Valve., GP = General Purpose Valve.

Rotary and Smart Actuator Motors

Instrument Valves

Process Control Accessories

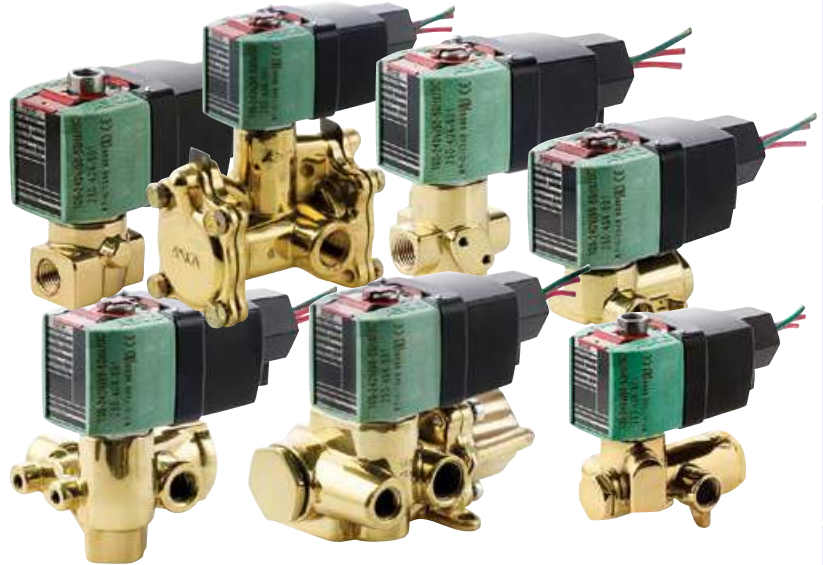
Pressure and Temperature Switches

ASCO Solenoid Valves

Pressure Gauges

3-Way and 4-Way Valves

- Three-way (3/2) Next Generation solenoid valves have three ports and two orifices. When one orifice is open, the other is closed.
- Normally closed, normally open, and universal operation (can function as normally open, normally closed, diverter of fluid flow, or selector of 2 fluid sources configurable by piping.)
- Four-way, four port (4/2) and five port (5/2) Next Generation solenoid valves have one pressure port, 2 cylinder ports, and either 1 or 2 exhaust ports.
- Single solenoid operation, pressure and exhaust ports and cylinder ports alternate connection based on solenoid operation.



Specify voltage range: 100-240 VAC/VDC, 24-99 VAC/VDC, or 12-24 VDC

Model Selection Guide

Material	Pipe Size (In)	Orifice Diam. (In)	Cv Flow Factor	Operating Pressure Differential (PSI)				Max. Fluid Temp.	UL	Wattage AC/DC	Catalog Number	Price	Rebuild Kit	Price
				Min.	Max AC/DC									
					Air/Inert Gas	Water	Light Oil							
Three-Way Solenoid Valve, General Service - Normally Closed (Pressure to Cylinder Port when Energized)														
Brass	1/4	3/32 c	0.17 c	0	205	205	205	180	GP	2	8314R035	\$181.00	322864	\$133.00
Stainless	1/4	3/32 c	0.17 c	0	205	205	205	180	GP	2	8314R121	245.00	—	—
Brass	1/4	1/8	0.27	0	145	145	145	180	GP	2	8314R036	198.00	322864	133.00
Brass	1/4	5/64	0.12	0	232	232	232	180	GP	2	8320P182	203.00	322722	118.00
Brass	1/4	7/64	0.23	0	150	150	150	180	GP	2	8320P184	167.00	322722	118.00
Brass	1/4	5/32	0.35	0	75	75	75	180	GP	2	8320P186	171.00	322722	118.00
Brass	1/4	3/32 a	0.20 a	5 d	150	150	100	180	GP	2	8317P035	241.00	—	—
Brass	1/4	9/32 b	0.80 b	10	200	200	200	180	GP	2	8321P001	402.00	—	—
Brass	3/8	9/32 b	0.80 b	10	200	200	200	180	GP	2	8321P002	402.00	—	—
Brass	3/8	5/8	2.5	10	250	250	-	180	GP	2	8316P054	405.00	322690	210.00
Brass	1/2	5/8	3.2	10	250	250	-	180	GP	2	8316P064	412.00	322690	210.00
Brass	3/4	11/16	4.8	10	250	250	-	180	GP	2	8316P074	640.00	—	—
Three-Way Solenoid Valve, General Service - Normally Open (Cylinder Port Exhausts when Energized)														
Brass	1/4	5/64	0.12	0	210	210	210	180	GP	2	8320P192	203.00	—	—
Brass	1/4	7/64	0.23	0	150	150	150	180	GP	2	8320P194	167.00	—	—
Three-Way Solenoid Valve, General Service - Universal Operation														
Brass	1/4	5/64	0.12	0	116	116	116	180	GP	2	8320P172	167.00	—	—
Brass	1/4	7/64	0.23	0	60	60	60	180	GP	2	8320P174	167.00	—	—
Brass	1/4	5/32	0.35	0	35	35	35	180	GP	2	8320P176	164.00	—	—

GP = General Purpose Valve.

a = 1/4" exhaust orifice with 0.73 Cv flow.
c = 3/32" exhaust orifice with 0.27 Cv flow.

b = 11/32" exhaust orifice with 1.2 Cv flow.
d = 10 psi minimum for light oils.

Model Selection Guide

Specify voltage range: 100-240 VAC/VDC, 24-99 VAC/VDC, or 12-24 VDC

Material	Pipe Size (In)	Orifice Diam. (In)	Cv Flow Factor		Operating Pressure Differential (PSI)				Max. Fluid Temp.	UL	Wattage AC/DC	Catalog Number	Price	Rebuild Kit	Price
			Pressure	Exhaust	Min.	Max AC/DC									
						Air/Inert Gas	Water	Light Oil							
Four-Way Solenoid Valve, General Service - Single Solenoid															
Brass	1/4	1/16 b	0.09	0.09	10	150	150	150	180°F	GP	2	8345P001	\$300.00	322925	\$151.00
Brass	1/4	1/4	0.80	1.00	10 a	250	250	250	180°F	GP	2	8344P070	596.00	322696	306.00
Brass	3/8	3/8	1.40	2.20	10 a	250	250	250	180°F	GP	2	8344P072	735.00	322697	324.00
Brass	1/2	3/8	1.40	2.20	10 a	250	250	250	180°F	GP	2	8344P074	735.00	322697	324.00
Brass	3/4	3/4	5.20	5.60	10 a	250	250	250	180°F	GP	2	8344P076	1695.00	322698	798.00
Brass	1	3/4	5.20	5.60	10 a	250	250	250	180°F	GP	2	8344P078	1695.00	322698	798.00

GP = General Purpose Valve.

a = 25 psi minimum for light oils.

b = 3/32" exhaust orifice.

Low Pressure 2-Way Solenoid Valves 8030 Series



Specifications

Nominal Ambient Temperature Ranges: Red-Hat and Red-Hat II Valves/AC Construction: 32° F to 125° F

Valve Parts in Contact with Fluids: Body: Brass or 18.8 S.S., as listed; Seals and Disc: Buna-N; Core Tube: 305 S.S.; Core and Plugnut: 430F S.S.; Core Spring: 302 S.S.; Shading Coil: Copper (brass body); Silver (stainless steel body); Stem: Nylon (Normally Open valves)

Electrical: Standard Voltage: 120 volts AC, 60 Hz; Other voltages available: 24, 240, 480 volts, AC, 60 Hz (or 110, 220 volts, AC, 50 Hz); 6, 12, 24, 120, 240 volts, DC.

Coil: Continuous duty molded Class F

Solenoid Enclosures: Valves in this series have either Red-Hat metal solenoid enclosures or Red-Hat II molded epoxy solenoids. Red-Hat II valves are identified by the letter G in their catalog numbers, e.g., 8030G10.

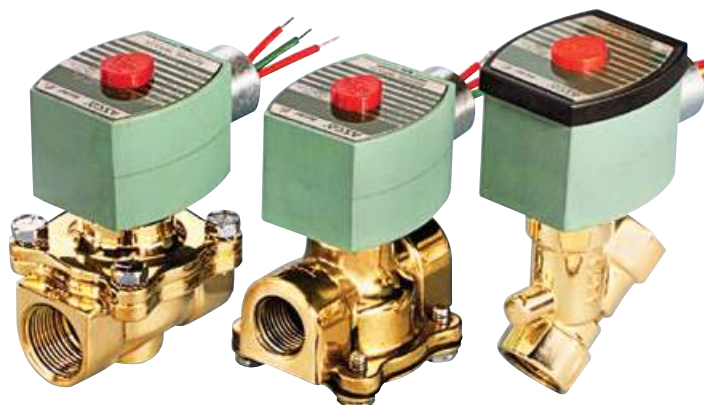
Standard Enclosures: Red-Hat: Type 1 General Purpose; Red-Hat II: Types 1-4, 3S, and 4X Combination General Purpose/ Watertight

Optional Enclosures: Red-Hat: Types 3, 7 and 9 Combination Explosion-proof and Raintight. Red-Hat II: Types 3, 3S, 4, 4X, 6, 6P, 7 and 9 Combination Explosion-proof and Watertight. T

Approvals: CSA certified. UL listing — if denoted with (•) valve is UL approved for General Purpose use. If denoted (o) valve is UL approved for use as a safety valve. FM approved on Normally Closed valves only, except Catalog Numbers 8030A17 and 8030A67.

Kits: Each kit includes all the internal parts that would require replacement in normal service. Included are the solenoid base sub-assembly, cores, resilient discs, seats, springs and all gaskets. Installation and maintenance sheets are packaged with each kit to simplify installation. Replacement Coils are not included.

*DuPont Co. trademark



Fax Us!!!

In Chicago Area (630)595-2386
In Wisconsin (262)923-1797

Model Selection Guide

Brass Body – 120 volts AC / 60 Hz

(Also Available in Stainless Steel. Please Call.)

Pipe Size (In.)	Orifice Size (In.)	Operating Pressure Differential (PSI)		Cv Flow Factor	Max. Fluid Temp.	UL Listed	Watt Rating/ Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
		Air/ Inert Gas	Water					Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
Normally Closed (Closed when de-energized)													
3/8	3/8	0-7	0-5	1.8	180°F	°	6.1/F	8030G010	\$112.00	302787	\$88.00	238210-032-D	\$84.00
3/8	3/8	0-15	0-15	1.8	180°F	°	10.1/F	8030G013	147.00	302788	117.00	238610-032-D	93.00
1/2	7/16	0-4	0-6	2.8	180°F	°	6.1/F	8030G016	114.00	302789	62.00	238210-032-D	84.00
1/2	7/16	0-15	0-15	2.8	200°F	°	15.4/F	8030G017	152.00	302790	121.00	099257-001-D	122.00
3/4	3/4	0-2	0-2	5	180°F	°	10.1/F	8030G003	187.00	302791	103.00	238610-032-D	93.00
3/4	3/4	0-4	0-4	5	180°F	°	17.1/F	8030G043	200.00	302791	103.00	238610-132-D	115.00
Normally Open (Open when de-energized)													
3/8	3/8	0-15	0-15	1.6	200°F	•	15.4/F	8030G070	226.00	302797	181.00	272610-032-D	116.00
1/2	7/16	0-15	0-15	2.2	200°F	•	20/F	8030G071	226.00	302798	181.00	272610-132-D	121.00
1/2	3/4	0-2	0-2	5	180°F	•	10.1/F	8030G082	253.00	302799	106.00	238610-032-D	93.00
3/4	3/4	0-2	0-2	5.5	180°F	•	10.1/F	8030G083	196.00	302799	106.00	238610-032-D	93.00



ASCO's Next Generation is Here!

- Lower power consumption
- Voltage ranging capabilities — one coil covers multiple voltages

See page 395 for details.

ASCO Red Hat
NEXT GENERATION

8040/8215 Series Aluminum Body 2-Way Solenoid Valves

Specifications

Nominal Ambient Temperature Ranges: AC Constructions: 32° to 125° F; DC Construction: Red-Hat Valves: 32° to 77° F (104° F occasionally); Red-Hat II Valves: 32° to 104° F

Valve Parts in Contact with Fluids: Body: Aluminum; Seals, Diaphragms, Discs: Buna-N; Disc Holder: Nylon (10.1 and 11.6 watt N/O only); Core Guide: Acetal; Rider Rings: Filled Teflon*; Core / Plugnut: 430F SS, Silicone Steel (8215A40, 8215A90); Springs: 302 SS; Shading Coil: Copper

Electrical: Standard Voltage: 120 volts AC, 60 Hz; Other Voltages Available: 24, 240, 480 volts, AC, 60 Hz (or 110, 220 volts, AC, 50 Hz); 6, 12, 24, 120, 240 volts, DC.

Coil: Continuous duty molded Class B or F, as listed

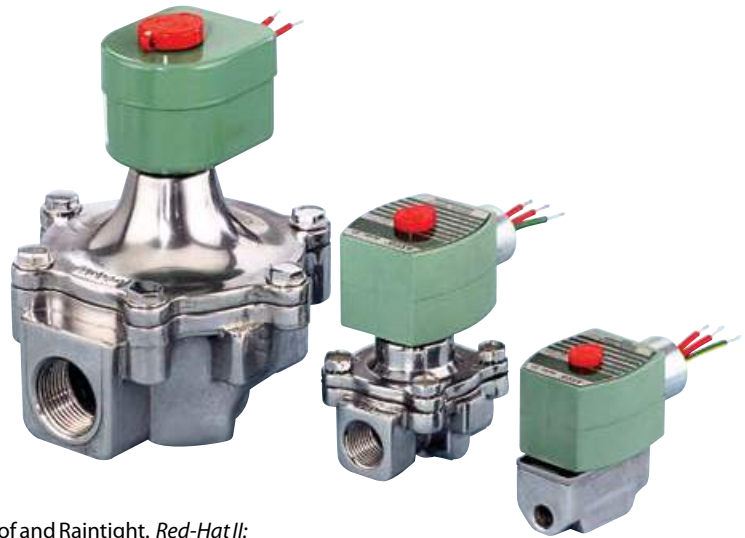
Solenoid Enclosures: Valves in this series have Red-Hat metal solenoid enclosures or Red-Hat II molded epoxy solenoids. Red-Hat II valves are identified by the letter G in their catalog numbers, e.g., 8040G10.

Standard Enclosures: Red-Hat: Type 1 General Purpose; Red-Hat II: Types 1-4, 3S, and 4X Combination General Purpose and Watertight

Optional Enclosures: Red-Hat: Types 3, 7 and 9 Combination Explosion-proof and Raintight. Red-Hat II: Types 3, 3S, 4, 4X, 6, 6P, 7 and 9 Combination Explosion-proof and Watertight. To order, add prefix EF to catalog number, except EF8215A40, EF8215A90 and EF8215B93.

Approvals: CSA certified. UL listing — if denoted with (•) valve is UL approved for General Purpose use. If denoted (o), valve is UL approved for use as a safety valve. FM approved on Normally Closed valves only except Catalog Numbers 8215A40 and 8215A90.

Kits: Include internal parts that may require replacement in normal service, solenoid base subassembly, cores, resilient discs, seats, springs, and gaskets. Installation and maintenance sheets packaged with each kit to simplify installation. Replacement coils must be ordered separately. All coils shown are 120V AC, 60 Hz.



Model Selection Guide

Aluminum Body — 120 volts AC/60 Hz

Pipe Size (In.)	Orifice Size (In.)	Operating Pressure Differential (PSI) Air, Fuel and Gas	Cv Flow Factor	Max. Fluid Temp.	UL Listed	Watt Rating/ Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
							Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
Normally Closed (Closed when de-energized)												
1/4	3/8	0-15	1.1	125°F	°	6.1/F	8040H007	\$73.00	314692	\$78.00	238210-032-D	\$84.00
3/8	3/8	0-15	1.2	125°F	°	6.1/F	8040H008	72.00	318247	58.00	238210-032-D	84.00
3/8	3/4	0-50	3.4	125°F	°	10.1/F	8215G010	153.00	302350	123.00	238610-032-D	93.00
1/2	3/4	0-50	4.4	125°F	°	10.1/F	8215G020	153.00	302350	123.00	238610-032-D	93.00
1/2	3/4	5-125	4.8	125°F	°	6.1/F	8215G002	147.00	302349	117.00	238210-032-D	84.00
3/4	3/4	0-2	9.5	125°F	°	10.1/F	8040G023	145.00	306633	78.00	238610-032-D	93.00
3/4	3/4	0-50	5.1	125°F	°	10.1/F	8215G030	159.00	302350	123.00	238610-032-D	93.00
3/4	1 5/8	0-50	11	125°F	°	15.4/F	8215 135	297.00	302352	230.00	099257-001-D	122.00
1	1 5/8	0-25	21	125°F	°	15.4/F	8215B050	287.00	302352	230.00	099257-001-D	122.00
1 1/4	1 5/8	0-25	32	125°F	°	15.4/F	8215B060	287.00	302352	230.00	099257-001-D	122.00
1 1/2	1 5/8	0-25	35	125°F	°	15.4/F	8215B070	332.00	302352	230.00	099257-001-D	122.00
2	2 3/32	0-25	60	125°F	°	15.4/F	8215B080	489.00	302353	293.00	099257-001-D	122.00
2 1/2	3	0-5	117	125°F	°	28.2/F	8215A090	741.00	302354	452.00	206409-011-D	292.00
3	3	0-5	138	125°F	°	28.2/F	8215A040	951.00	302354	452.00	206409-011-D	292.00
Normally Open (Open when de-energized)												
1/2	3/4	0-125	4	125°F	•	10.1/F	8215G023	250.00	302361	186.00	238210-032-D	84.00
3/4	3/4	0-125	4.6	125°F	•	10.1/F	8215G033	252.00	302361	186.00	238610-032-D	93.00
1	1 5/8	0-25	22	125°F	•	15.4/F	8215C053	415.00	304691	309.00	099257-001-D	122.00
1 1/4	1 5/8	0-25	33	125°F	•	15.4/F	8215C063	474.00	304691	309.00	099257-001-D	122.00
1 1/2	1 5/8	0-25	37	125°F	•	15.4/F	8215C073	552.00	304691	309.00	099257-001-D	122.00
2	2 3/32	0-25	58	125°F	•	15.4/F	8215C083	670.00	304692	491.00	099257-001-D	122.00

General Service Brass 2-Way Solenoid Valves 8210 Series

Specifications

Nominal Ambient Temperature Ranges: AC Models: 32° to 125° F; DC Models: Red-Hat Valves: 32° to 77° F (104° F occasionally); Red-Hat II Valves: 32° to 104° F

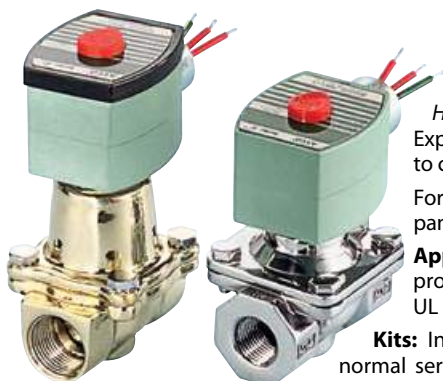
Valve Parts in Contact with Fluids: Body: Brass or Stainless Steel; Seals/Discs: Buna-N or Teflon; Disc Holder: Nylon; Core Tube: 305 S.S.; Core and Plugnut: 430F S.S.; Springs: 302 S.S.; Shading Coil: Copper (brass body); Silver (SS body)

Coil: Continuous duty molded Class F or H, as listed.

Electrical: Standard Voltage: 120 volts AC, 60 Hz; Other voltages available: 24, 240, 480 volts, AC, 60 Hz (or 110, 220 volts, AC, 50 Hz); 6, 12, 24, 120, 240 volts, DC.

Solenoid Enclosures: Valves in this series have either Red-Hat metal solenoids or Red-Hat II molded epoxy solenoids. Red-Hat II valves are identified by the letter G in their catalog numbers, e.g., 8210G4.

Standard Enclosures: Red-Hat: Type 1 General Purpose; Red-Hat II: Types 1-4, 3S, and 4X Combination General Purpose and Watertight



Optional Enclosures: Red-Hat: Types 3, 7 and 9 Combination Explosion-proof and Raintight. Red-Hat II: Types 3, 3S, 4, 4X, 6, 6P, 7 and 9 Combination Explosion-proof and Watertight. To order, add prefix EF to catalog number and call for price and availability.

For open frame solenoids, junction box enclosures, panel mount constructions,

Approvals: CSA certified. If denoted (+), valve is UL approved for General Purpose use. If denoted (o), valve is UL approved as a safety shut off valve.

Kits: Include all internal parts that require replacement in normal service. Includes solenoid base subassembly, cores, resilient discs, seats, springs and all gaskets. Simple installation and maintenance sheets are packaged with each kit. Replacement Coils must be ordered separately. All coils shown are 120 volts AC, 60 Hz.

Model Selection Guide

Brass Body, Buna-N or Teflon® Seating – 120 volts AC / 60 Hz

(Also Available in Stainless Steel. Please Call.)

Pipe Size (In.)	Orifice Size (In.)	Operating Pressure Differential (PSI)			Cv Flow Factor	Max. Fluid Temp.	UL Listed	Watt Rating/ Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
		Air/ Inert Gas	Water	Lt. Oil 300SSU					Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
Normally Closed (Closed when de-energized)														
3/8	3/8	5-150	1-125	—	1.5	180°F	•	6.1/F	8210G073	\$101.00	302271	\$81.00	238210-032-D	\$84.00
3/8	5/8	0-50	0-50	—	2.8	125°F	•	10.1/F	8210G074	191.00	304076	152.00	238610-032-D	93.00
3/8	5/8	0-150	0-150	—	3	180°F	•	10.1/F	8210G093	134.00	302272	108.00	238610-032-D	93.00
3/8	5/8	5-200	5-150	5-135	3	180°F	•	6.1/F	8210G001	115.00	302273	93.00	238210-032-D	84.00
3/8	5/8	5-130	5-300	5-300	3	175°F	•	17.1/F	8210G006	164.00	302274	103.00	238610-132-D	115.00
1/2	7/16	5-150	1-125	—	2.2	180°F	•	6.1/F	8210G015	111.00	302275	83.00	238210-032-D	84.00
1/2	5/8	0-50	0-50	—	3.6	125°F	•	10.1/F	8210G075	191.00	304076	152.00	238610-032-D	93.00
1/2	5/8	0-150	0-150	—	4	180°F	•	10.1/F	8210G094	134.00	302272	108.00	238610-032-D	93.00
1/2	5/8	5-200	5-150	5-135	4	180°F	•	6.1/F	8210G002	115.00	302273	93.00	238210-032-D	84.00
1/2	5/8	5-300	5-300	5-300	4	175°F	•	17.1/F	8210G007	164.00	302274	103.00	238610-132-D	115.00
3/4	3/4	0-50	0-50	—	5.5	125°F	•	10.1/F	8210G076	211.00	304076	152.00	238610-032-D	93.00
3/4	3/4	5-125	5-125	5-125	5	180°F	•	6.1/F	8210G009	132.00	302277	97.00	238210-032-D	84.00
3/4	3/4	0-150	0-150	—	5	180°F	•	10.1/F	8210G095	145.00	302276	116.00	238610-032-D	93.00
3/4	3/4	5-250	5-150	5-100	6.5	180°F	•	6.1/F	8210G003	180.00	302279	96.00	238210-032-D	84.00
3/4	3/4	0-350	0-300	0-200	6	200°F	•	15.4/F	8210G026	349.00	302278	280.00	272610-032-D	116.00
1	1	0-150	0-125	0-125	13	180°F	•	15.4/F	8210G054	310.00	302283	248.00	272610-032-D	116.00
1	1	5-150	5-150	5-100	13	180°F	•	6.1/F	8210G004	231.00	302280	140.00	238210-032-D	84.00
1	1	0-300	0-225	0-115	13.5	200°F	•	20.1/F	8210G027①	520.00	302282	374.00	272610-132-D	116.00
1 1/4	1 1/8	0-150	0-125	0-125	15	180°F	•	15.4/F	8210G055	349.00	302283	248.00	272610-032-D	116.00
1 1/4	1 1/8	5-150	5-150	5-100	15	180°F	•	6.1/F	8210G008	281.00	302280	140.00	238210-032-D	84.00
1 1/2	1 1/4	0-150	0-125	0-125	22.5	180°F	•	15.4/F	8210G056	470.00	302286	374.00	272610-032-D	116.00
1 1/2	1 1/4	5-150	5-150	5-100	22.5	180°F	•	6.1/F	8210G022	428.00	302284	196.00	238210-032-D	84.00
2	1 3/4	5-150	5-125	5-90	43	180°F	•	6.1/F	8210G100	755.00	304355	404.00	238210-032-D	84.00
Normally Open (Open when de-energized)														
3/8	5/8	0-150	0-150	0-125	3	180°F	•	10.1/F	8210G033	232.00	302334	163.00	238610-032-D	93.00
1/2	5/8	0-150	0-150	0-125	4	180°F	•	10.1/F	8210G034	232.00	302334	163.00	238610-032-D	93.00
3/4	3/4	0-150	0-150	0-125	5.5	180°F	•	10.1/F	8210G035	232.00	302335	186.00	238610-032-D	93.00
3/4	3/4	5-250	5-200	5-200	6.5	180°F	•	15.4/F	8210G013	289.00	302336	151.00	272610-032-D	116.00
1	1	0-125	0-125	0-125	13	180°F	•	20/F	8210B057**	682.00	302337	361.00	099257-005-D	162.00
1	1	5-150	5-150	5-125	13	180°F	•	15.4/F	8210G014	333.00	302338	165.00	272610-032-D	116.00
1 1/4	1 1/8	0-125	0-125	0-125	15	180°F	•	20/F	8210B058**	693.00	302339	514.00	099257-005-D	162.00
1 1/4	1 1/8	5-150	5-150	5-125	15	180°F	•	15.4/F	8210G018	384.00	302338	165.00	272610-032-D	116.00
1 1/2	1 1/4	0-125	0-125	0-125	22.5	180°F	•	20/F	8210B059**	864.00	302340	410.00	099257-005-D	162.00
1 1/2	1 1/4	5-150	5-150	5-125	22.5	180°F	•	15.4/F	8210G032	508.00	302341	211.00	272610-032-D	116.00
2	1 3/4	5-125	5-125	5-125	43	180°F	•	15.4/F	8210G103	859.00	304361	431.00	272610-032-D	116.00

** Models not available with the explosion-proof enclosure option.

① The 8210G27 has a Teflon main disk.

8210/8220/8263 Series Hot Water and Steam 2-Way Solenoid Valves

Specifications

Construction: *Hot Water:* Pilot-operated diaphragm valves (8210HW Series); *Hot Water/Steam:* Direct-acting valves (8263 Series); Pilot-operated piston valves (8220 Series)

Solenoid Enclosures: Valves listed in this series have either Red-Hat metal solenoid enclosures or Red-Hat II molded epoxy solenoids. Red-Hat II valves identified by change letter G in catalog number, e.g., 8210G93HW.

Standard Enclosures: *Red-Hat:* Type 1 General Purpose; *Red-Hat II:* Types 1-4, 3S, and 4X Combination General Purpose, Watertight

Optional Enclosures: *Red-Hat:* Types 3, 7 and 9 Combination Explosion-proof and Raintight. *Red-Hat II:* Types 3, 3S, 4, 4X, 6, 6P, 7 and 9 Combination Explosion-proof and Watertight. To order, add prefix EF to catalog number and call for price and availability.

Nominal Ambient Temperature Ranges: *Red-Hat and Red-Hat II Valves/AC Construction:* 32° to 125° F; *Red-Hat II Valves/DC Construction:* 32° to 104° F (8210HW Series only).

Coil: Continuous duty molded Class F or H, as listed

Electrical: *Standard Voltage:* 120 volts AC, 60 Hz; *Other voltages available:* 24, 240, 480 VAC, 60 Hz (or 110, 220 VAC, 50 Hz); 6, 12, 24, 120, 240 VDC (8210HW Series only).

Valve Parts in Contact with Fluids: *Body:* Brass; *Core Tube:* 305 SS; *Core/Plugnut:* 430F SS; *Springs:* Inconel, 17-7PH SS; *Shading Coil:* Copper. *8210HW Series: Seals, Discs and Diaphragms:* Ethylene Propylene; *8263 Series: Disc/Seals:* Teflon*; *8220 Series: Piston:* Stainless Steel; *Discs:* Ethylene Propylene or Teflon*, as listed; *Seals:* Rulon**, Ethylene Propylene

*DuPont Co. trademark

**Dixon Industries Co. trademark

This is a combined listing of ASCO solenoid valves proven for hot water or steam service.



Approvals: CSA certified. 8210 Series is UL listed as General Purpose valve on AC voltage only. All other valves are UL listed for General Purpose use.

Important: Explosion-proof Catalog Numbers EF8210HW, EF8220 and EF8263 are not UL listed. They are suitable for Types 4, 7 (C and D) and 9 (E and F) only and have a temperature range code of T3A.

Kits: Include all internal parts that require replacement in normal service (i.e., solenoid base sub-assembly, cores, resilient discs, seats, springs and all gaskets). Installation and maintenance sheets are packaged with each kit to simplify installation. Replacement Coils must be ordered separately. All coils shown are 120 volts AC, 60 Hz.

Model Selection Guide

Hot Water Service Only — Brass Body, Ethylene Propylene Diaphragm — 120 volts AC/60 Hz

(Also Available in Stainless Steel. Please Call.)

Pipe Size (In.)	Orifice Size (In.)	Operating Pressure Differential (PSI)		Cv Flow Factor	Max. Fluid Temp.	UL Listed	Watt Rating/ Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
		Hot Water Only						Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
Normally Closed (Closed when de-energized)													
3/8	5/8	0-100		3	210°F	•	10.1/F	8210G093HW	\$157.00	302306	\$120.00	238610-032-D	\$93.00
3/8	5/8	5-125		3	210°F	•	6.1/F	8210G001HW	138.00	302305	108.00	238210-032-D	84.00
1/2	5/8	0-100		4	210°F	•	10.1/F	8210G094HW	157.00	302306	120.00	238610-032-D	93.00
1/2	5/8	5-125		4	210°F	•	6.1/F	8210G002HW	138.00	302305	108.00	238210-032-D	84.00
3/4	3/4	0-100		5	210°F	•	10.1/F	8210G095HW	167.00	302308	135.00	238610-032-D	93.00
3/4	3/4	5-125		5	210°F	•	6.1/F	8210G009HW	155.00	302307	108.00	238210-032-D	84.00

Hot Water and Steam Service — Brass Body — 120 volts AC / 60 Hz

(8263 Series Also Available in Stainless Steel. Please Call.)

Pipe Size (In.)	Orifice Size (In.)	Operating Pressure Differential (PSI)		Cv Flow Factor	Maximum Fluid Temp. °F		UL Listed	Watt Rating/ Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil		
		Steam	Hot Water		Steam	Hot Water			Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each	
Normally Closed (Closed when de-energized)															
1/4	5/32	0-110	0-110	0.52	344	210	•	10.1/H	8263H300	\$149.00	302037	\$91.00	238810-032-D	\$185.00	
3/8	5/32	0-110	0-110	0.52	344	210	•	10.1/H	8263H305	163.00	302037	91.00	238810-032-D	185.00	
1/2	1/2	5-50	5-150	4.7	300	210	•	10.1/F	8220G404	163.00	323482	131.00	238610-032-D	93.00	
1/2	1/2	5-125	5-150	4.7	353	210	•	10.1/H	8220G406	224.00	323468	123.00	238810-032-D	185.00	
3/4	3/4	5-50	5-150	8.8	300	210	•	10.1/F	8220G407	170.00	323480	136.00	238610-032-D	93.00	
3/4	3/4	5-125	5-150	8.8	353	210	•	10.1/H	8220G409	287.00	323471	174.00	238810-032-D	185.00	
1	1	5-50	5-150	11.5	300	210	•	10.1/F	8220G410	378.00	323478	222.00	238610-032-D	93.00	
1	1	5-125	5-150	11.5	353	210	•	10.1/H	8220G411	576.00	323479	315.00	238810-032-D	185.00	
1 1/4	1 1/8	5-50	5-150	15	300	210	•	10.1/F	8220G009	378.00	304394	202.00	238610-032-D	93.00	
1 1/4	1 1/8	5-125	5-150	15	353	210	•	10.1/H	8220G027	650.00	304392	315.00	238810-032-D	185.00	
1 1/2	1 1/4	5-50	5-150	22.5	300	210	•	10.1/F	8220G011	491.00	304393	263.00	238610-032-D	93.00	
1 1/2	1 1/4	5-125	5-150	22.5	353	210	•	10.1/H	8220G029	840.00	304393	375.00	238810-032-D	185.00	
2	1 3/4	5-125	5-150	43	353	210	•	10.1/H	8220G031	1097.00	306807	488.00	238810-032-D	185.00	

Miniature General Service 2-Way Solenoid Valves 8262 Series

Features

- New models now available
- AC pressure ratings increased 30% over older model 8262G valves; DC pressure ratings increased by 60% over older models
- UL, CSA, and CE approvals available on most models; Normally closed valves FM approved
- Increased ambient temperature range, so valves can be used in more environments. Minimum ambient temperature -13°F for air and gas applications, maximum ambient temperature 131°F standard on AC and DC models; Optional 140°F max for AC valves (call for option pricing)
- Easy installation and mounting — 5mm tapped holes on body provide quick, easy mounting on any flat surface



Ambient Temperature: AC Units: -13° to 131° F; DC Units: -13° to 104° F.

Valve Parts in Contact with Fluids: Body: Brass or 304 SS; Seals and Discs: NBR or Cast Urethane; Core Tube: 305 SS; Core and Plugnut: 430F SS; Shading Coil: Copper (brass body); Silver (SS body); Springs: 302 SS. All 1/8" NPT N/O valves contain Acetal. All 1/4" NPT N/O valves contain Nylon.

Coil: Continuous duty molded Class F. Coils shown: 120VAC, 60Hz.

Electrical: Standard Voltage: 120 VAC, 60 Hz; Others available: 24, 240, 480 VAC, 60 Hz (or 110, 220 VAC, 50 Hz); 6, 12, 24, 120, 240 VDC. Call for prices.

Solenoid Enclosures: Valves in this series have Red-Hat II molded epoxy solenoids, identified by the letter G in their catalog numbers, e.g., 8262G2.

Standard Enclosures: Red-Hat II: Types 1-4, 3S, and 4X Combination General Purpose and Watertight.

Optional Enclosures: Red-Hat II: Types 3, 3S, 4, 4X, 6, 6P, 7 and 9 Combination Explosion-Proof and Watertight. Add prefix EF to catalog number. Call for price and availability.

Approvals: CSA certified. UL listing: if denoted with (+) valve is UL approved for General Purpose use. If denoted with (-) valve is UL approved for use as a safety valve. FM approved (N/C valves only).

Kits: Include all internal parts that may require replacement in normal service. (Solenoid base subassembly, cores, resilient discs, seats, springs and all gaskets.) Installation/maintenance sheets are packed with each kit to simplify installation. Replacement coils must be ordered separately.

Specifications

Model Selection Guide

(Other sizes available. Please Call.)

Pipe Size (In.)	Orifice Size (In.)	Maximum Operating Pressure Differential (PSI)			Cv Flow Factor	Max. Fluid Temp.	UL Listed	Watt Rating/Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil		
		Air/Inert Gas	NBR Disc	Lt. Oil 300SSU					Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each	
1/8	3/64	750	750	725	0.06	180°F	°	6.1/F	8262H001	\$53.00	—	—	238210-032-D	\$84.00	
1/8	3/32	370	330	190	0.20	180°F	°	6.1/F	8262H014	49.00	—	—	238210-032-D	84.00	
1/8	1/8	185	180	120	0.34	180°F	°	6.1/F	8262H002	48.00	—	—	238210-032-D	84.00	
1/4	3/64	750	750	725	0.06	180°F	°	6.1/F	8262H019	65.00	—	—	238210-032-D	84.00	
1/4	1/8	185	180	90	0.35	180°F	°	6.1/F	8262H022	57.00	—	—	238210-032-D	84.00	
1/4	1/8	340	300	215	0.35	180°F	°	10.1/F	8262H232	70.00	—	—	238610-032-D	93.00	
1/4	5/32	210	200	145	0.50	180°F	°	10.1/F	8262H202	67.00	—	—	238610-032-D	93.00	
1/4	7/32	100	100	100	0.72	180°F	°	10.1/F	8262H208	70.00	—	—	238610-032-D	93.00	
1/4	7/32	55	54	40	0.85	180°F	°	6.1/F	8262H013	59.00	—	—	238210-032-D	84.00	
1/4	9/32	65	75	60	0.88	180°F	°	10.1/F	8262H210	67.00	—	—	238610-032-D	93.00	
1/4	9/32	90	90	90	0.88	180°F	°	17.1/F	8262H212	88.00	—	—	238610-132-D	115.00	
3/8	1/8	185	180	90	0.35	180°F	°	6.1/F	8263H002	99.00	—	—	238210-032-D	84.00	
3/8	5/32	210	185	100	0.52	180°F	°	10.1/F	8263H200	108.00	—	—	238610-032-D	93.00	
3/8	7/32	125	100	100	0.72	180°F	°	17.1/F	8263H206	122.00	—	—	238610-132-D	115.00	
3/8	9/32	100	85	70	0.85	180°F	°	17.1/F	8263H210	153.00	—	—	238610-132-D	115.00	
Cast 304 Stainless Steel Body, NBR Disc, 120 VAC/60 Hz: Normally Closed (Closed when de-energized)															
1/4	1/8	185	180	90	0.35	180°F	°	6.1/F	8262H007	95.00	—	—	238210-032-D	84.00	
1/4	3/32	370	330	160	0.17	180°F	°	6.1/F	8262H086	95.00	—	—	238210-032-D	84.00	
1/4	5/32	210	200	145	0.50	180°F	°	10.1/F	8262H220	99.00	—	—	238610-032-D	93.00	
1/4	7/32	100	100	100	0.72	180°F	°	10.1/F	8262H226	99.00	—	—	238610-032-D	93.00	
1/4	9/32	90	90	90	0.88	180°F	°	17.1/F	8262H230	130.00	—	—	238610-132-D	115.00	
Brass Body, NBR Disc, 120 VAC/60 Hz: Normally Open (Open when de-energized)															
* Standard disk on these valves is made of Urethane															
1/4	3/64	750	700	700	0.06	140°F	•	10.1/F	8262H260*	105.00	302045	86.00	238610-032-D	93.00	
1/4	3/32	300	250	250	0.17	140°F	•	10.1/F	8262H261*	105.00	302045	86.00	238610-032-D	93.00	
1/4	1/8	130	110	100	0.35	180°F	•	10.1/F	8262H262	105.00	302051	211.00	238610-032-D	93.00	
1/4	5/32	85	75	60	0.49	180°F	•	10.1/F	8262H263	105.00	302051	211.00	238610-032-D	93.00	
1/4	7/32	45	45	40	0.83	180°F	•	10.1/F	8262H264	105.00	302051	211.00	238610-032-D	93.00	
1/4	9/32	30	25	20	0.96	180°F	•	10.1/F	8262H265	105.00	302051	211.00	238610-032-D	93.00	

8256/8356 Series Sub-Mini General Service Solenoid Valve

Features

- Increased maximum pressure ratings over predecessor model 8225/8236 valves
- Optimized coil and core design for long life and trouble-free operation — reduced noise, improved response times, and increased cycle rate
- Reduced size for light weight and ease of installation and service
- 2-way normally closed, 3-way normally closed, normally open, or universal operation
- NSF 61 and 169 versions available for potable water and food service.
- General service, NSF, gas shutoff and safety shutoff models are RoHS compliant (European directive 2002/95/EC)
- Brass and 316 stainless steel body constructions

Specifications

Construction: *Body:* Brass with stainless steel core tube and plated steel bonnet (general purpose), or 316 stainless steel body, core tube, and bonnet (general purpose or NSF); *Core, springs, and plugnut:* Stainless steel; *Seals and disc:* FKM; *NSF models:* EPDM; *Shading coil:* Copper; *NSF models:* Silver

Standard Voltages: 24, 120, 240 VAC, 50-60 Hz; 12, 24, or 120 VDC



Approvals: UL recognized coil, File MH28173 CSA recognized coil, CSA certificate No. 235748; Available as NSF 61 drinking water system components, NSF 169 special purpose food equipment and devices

Solenoid Enclosures: *Standard:* Open frame (Prefix U) 18" leads; *Optional:* DIN (size 11mm, form B) (Prefix SC). Watertight/IP-65 when used with DIN connector kit for SC coils

Kits: 1/2" NPT conduit hub kit for leaded coils [224735-001-*]. DIN connector kit for SC coils [226061-001-*], Mounting adapter kit [289719].

Model Selection Guide

(Also available in general purpose or NSF-listed stainless steel bodies. Please Call.)

Pipe Size (In.)	Orifice Size (In.)	Maximum Operating Pressure Differential (PSI)			Cv** Flow Factor	Max. Fluid Temp.	Watt Rating/ Class of Coil Insulation	Replaces... Obsolete Model	Solenoid Valve		Replacement Coil	
		Air/ Inert Gas	Water	Lt. Oil 300SSU					Catalog Number	Price Each	Catalog Number	Price Each
Two-Way, Normally Closed (Closed when de-energized) — General Service, Brass Body, 120 VAC, 50-60 Hz												
1/8	3/64	500	500	400	0.05	180°F	6.3/F	8225B001V	U8256A001V	\$39.00	400117-225-D	\$48.00
1/8	1/16	400	390	230	0.08	180°F	6.3/F	8225B002V	U8256A002V	39.00	400117-225-D	48.00
1/8	3/32	180	180	105	0.15	180°F	6.3/F	8225B003V	U8256A004V	39.00	400117-225-D	48.00
1/8	7/64	135	126	80	0.19	180°F	6.3/F	8225B004V	U8256B045V	39.00	400117-225-D	48.00
Three-Way, Normally Closed (Closed when de-energized) — General Service, Brass Body, 120 VAC, 50-60 Hz												
1/8	3/64	230	235	245	0.06	180°F	6.3/F	8325B005V	U8356A001V	51.00	400117-225-D	48.00
1/8	1/16	140	140	150	0.09	180°F	6.3/F	8325B006V	U8356A002V	51.00	400117-225-D	48.00
1/8	3/32	75	72	77	0.13	180°F	6.3/F	8325B007V	U8356A004V	51.00	400117-225-D	48.00
1/8	7/64	70	61	72	0.15	180°F	6.3/F	8325B008V	U8356B045V	51.00	400117-225-D	48.00
Three-Way, Normally Open (Open when de-energized) — General Service, Brass Body, 120 VAC, 50-60 Hz												
1/8	3/64	175	180	175	0.06	180°F	6.3/F	8325B009V	U8356A005V	51.00	400117-225-D	48.00
1/8	1/16	165	180	175	0.09	180°F	6.3/F	8325B010V	U8356A006V	51.00	400117-225-D	48.00
1/8	3/32	160	175	120	0.13	180°F	6.3/F	8325B011V	U8356A008V	51.00	400117-225-D	48.00
1/8	7/64	148	180	99	0.15	180°F	6.3/F	8325B012V	U8356B054V	51.00	400117-225-D	48.00
Three-Way, Universal Operation — General Service, Brass Body, 120 VAC, 50-60 Hz												
1/8	3/64	135	135	135	0.06	180°F	6.3/F	8325B001V	U8356A009V	51.00	400117-225-D	48.00
1/8	1/16	72	72	72	0.09	180°F	6.3/F	8325B002V	U8356A010V	51.00	400117-225-D	48.00
1/8	3/32	36	33	40	0.13	180°F	6.3/F	8325B003V	U8356A012V	51.00	400117-225-D	48.00
1/8	7/64	45	32	27	0.15	180°F	6.3/F	8325B004V	U8356B047V	51.00	400117-225-D	48.00
Options and Accessories		Specify a Class F high temperature DIN-type connector (replaces leaded coil connector) 1/2" NPT conduit hub kit for leaded coils (10 each: threaded hub, gasket, and attaching screw) DIN connector kit for SC coils (10 each: connector, gasket, and attaching screw) Mounting adapter kit (Two screws and plate)									Add prefix SC	\$0.00
											224735-001-*	\$0.00
											226061-001-*	\$0.00
											289719	\$5.00

** Cv flow factor shown for three-way valves is for Port 2. Cv at Port 3 is 0.06 for all models shown.

High Pressure 2-Way Solenoid Valves 8223 Series



Specifications

Nominal Ambient Temperature Ranges: AC Construction: 32° to 125° F;
DC Construction: 32° to 104° F.

Valve Parts in Contact with Fluids: Body: Brass or 300 S.S., as listed; Seals and Discs: Teflon* and Buna-N (also Nylon on brass valves); Core Tube: 305 S.S.; Springs: 302 S.S.; Shading Coil: Copper (brass body); Silver (stainless steel body)

Electrical: Standard Voltage: 120 VAC, 60 Hz; Other voltages available: 24, 240, 480 VAC, 60 Hz; (or 110, 220 VAC, 50 Hz); 6, 12, 24, 120, 240 VDC.

Coil: Continuous duty molded Class F. Coils shown are 120 VAC, 60 Hz.

Solenoid Enclosures: Valves in this series have Red-Hat II molded epoxy solenoids and are identified by the letter G in their catalog numbers, e.g., 8223G21.

Standard Enclosures: Red-Hat II: Types 1-4, 3S, and 4X Combination General Purpose and Watertight

Optional Enclosures: Red-Hat II: Types 3, 3S, 4, 4X, 6, 6P, 7 and 9 Combination Explosion-proof and Watertight.

Other constructions are available. For optional electrical features such as open frame solenoids, junction box enclosures, panel mount constructions.

Approvals: CSA certified. UL listed.

Kits: Include all the internal parts that would require replacement in normal service. Included are the solenoid base sub-assembly, cores, resilient discs, seats, springs and all gaskets. Installation and maintenance sheets are packaged with each kit to simplify installation. Replacement Coils must be ordered separately.

*DuPont Co. trademark

Dimensions

Pipe Size	H	L	P	W
1/4"	3 13/32"	2 7/16"	2 7/8"	1 31/32"
3/8"	3 13/32"	2 7/16"	2 7/8"	1 31/32"
1/2"	4 5/16"	3 1/32"	3 1/8"	1 31/32"
3/4"	5 1/32"	3 19/32"	3 5/8"	2"

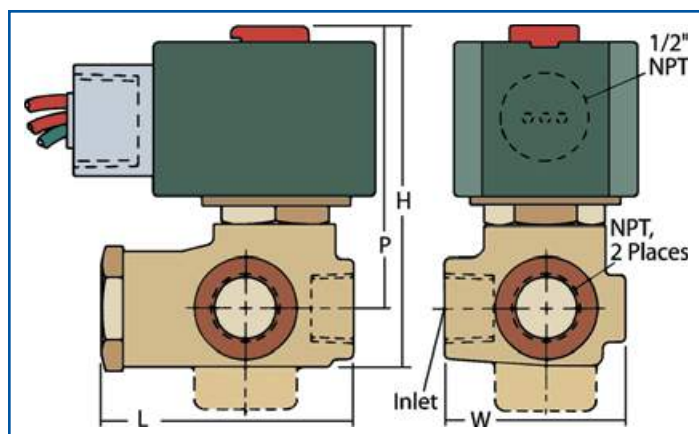
Note: Valves may be mounted in any position.
Inlet located at bottom for valves 8223G003 and 8223G005.

Model Selection Guide

Brass Body - 120 volts AC / 60 Hz

(Also Available in Stainless Steel. Please Call.)

Pipe Size (In.)	Orifice Size (In.)	Operating Pressure Differential (PSI)			Cv Flow Factor	Max. Fluid Temp.	Watt Rating/ Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
		Air/ Inert Gas	Water	Lt. Oil 300SSU				Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
Normally Closed (Closed when de-energized)													
1/4	5/16	10-750	10-750	10-750	1.5	200°F	10.1/F	8223G021	\$204.00	302313	\$163.00	238610-032-D	\$93.00
1/4	5/16	10-1500	10-1500	10-1500	1.5	200°F	17.1/F	8223G025	268.00	302314	215.00	238610-132-D	115.00
3/8	5/16	10-750	10-750	10-750	1.5	200°F	10.1/F	8223G023	204.00	302313	163.00	238610-032-D	93.00
3/8	5/16	10-1500	10-1500	10-1500	1.5	200°F	17.1/F	8223G027	268.00	302314	215.00	238610-132-D	115.00
1/2	3/8	25-1500	25-1500	25-1500	3.2	200°F	17.1/F	8223G003	506.00	302315	406.00	238610-132-D	115.00
3/4	3/4	25-750	25-750	25-750	7.8	200°F	17.1/F	8223G005	675.00	302316	255.00	238610-132-D	115.00



8221 Series 2-Way Pilot-Operated Slow Closing Solenoid Valves

Specifications

Solenoid Enclosures: Valves in this series have Red-Hat metal solenoid enclosures or Red-Hat II molded epoxy solenoids. Red-Hat II solenoids are identified by the letter G in their catalog numbers, e.g., 8221G1.

Standard Enclosures: *Red-Hat:* Type 1 General Purpose; *Red-Hat II:* Types 1–4, 3S, and 4X combination General Purpose and Watertight.

Optional Enclosures: *Red-Hat:* Types 3, 7, and 9 combination Explosion-proof and raintight. *Red-Hat II:* Types 3, 3S, 4, 4X, 6, 6P, 7, and 9 combination Explosion-proof and Watertight. To order, add prefix EF to catalog number.

Additional constructions are available. Call for options (open frame solenoids, junction box enclosures, and panel mount constructions).

Electrical: *Standard Voltage:* 24, 120, 240, 480 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz); 6, 12, 24, 120, 240 volts DC; Other voltages available as required.

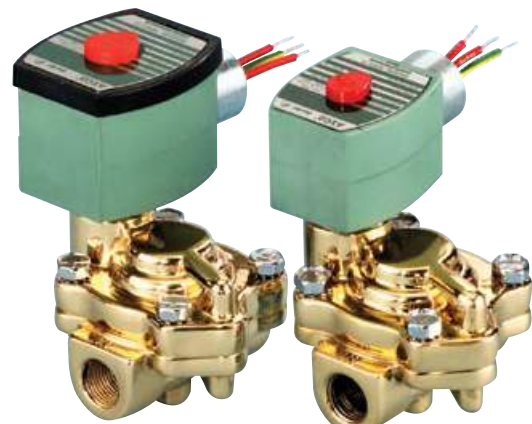
Coil: Continuous duty molded Class F.

Valve Parts in Contact with Fluids: *Body:* Brass; *Disc:* Buna-N; *Seals:* Rulon**; *Core Tube:* 305 SS; *Core/Plugnut:* 430F SS; *Springs:* Stainless steel; *Piston:* Stainless steel or brass; *Shading Coil:* Copper

Nominal Ambient Temperature Ranges: *AC Constructions:* 32° to 125° F. *Red Hat Valves/DC Construction:* 32° to 77° F (104° F occasionally); *Red Hat II Valves/DC Construction:* 32° to 104° F.

Approvals: CSA certified. UL listed general purpose valves.

** Dixon Industries Co. trademark



Great for eliminating water hammer problems in water and light oil systems.

Model Selection Guide

Brass Body – 120 volts AC / 60 Hz

Pipe Size (In.)	Orifice Size (In.)	Operating Pressure Differential (Water)	Cv Flow Factor	Max. Fluid Temp.	Watt Rating/ Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
						Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
Normally Closed (Closed when de-energized)											
3/8	9/16	5–150 PSI	3	180°F	6.1/F	8221G001	\$230.00	310387	\$121.00	238210-032-D	\$84.00
1/2	9/16	5–150 PSI	3.5	180°F	6.1/F	8221G003	230.00	310387	121.00	238210-032-D	84.00
3/4	3/4	5–150 PSI	5.5	180°F	6.1/F	8221G005	247.00	310388	134.00	238210-032-D	84.00
1	1	5–150 PSI	11.5	180°F	6.1/F	8221G007	504.00	310420	269.00	238210-032-D	84.00
1 1/4	1 1/8	5–150 PSI	13	180°F	6.1/F	8221G009	601.00	310506	333.00	238210-032-D	84.00
1 1/2	1 1/4	5–150 PSI	24	180°F	6.1/F	8221G011	871.00	310421	448.00	238210-032-D	84.00
2	1 3/4	5–150 PSI	36	180°F	6.1/F	8221G013	1055.00	310422	517.00	238210-032-D	84.00

212 Series 2-Way Lead-Free Composite Body Solenoid Valves

No lead! Meets NSF standards for drinking water and food equipment applications.

Specifications

Application: On/off service for clean, potable water

Fluid Temperature: 180°F max.

Operating Pressure Differential (Water): *Normally Closed:* 5–150 PSI; *Normally Open:* 5–120 PSI

Coil: Continuous duty molded Class F.

Valve Parts in Contact with Fluids: *Body:* Composite engineered PPE plastic; *Core Tube, Bonnet, Core, Plugnut, and Springs:* Stainless Steel; *Seals and Disc:* EPDM, TPE; *Shading Coil:* Copper

Standard Voltages: 120/60 VAC standard, 24/60 and 240/60 VAC. 12 or 24 VDC

Approvals: UL recognized and CSA certified coil



ASCO 212 valves are certified to meet:

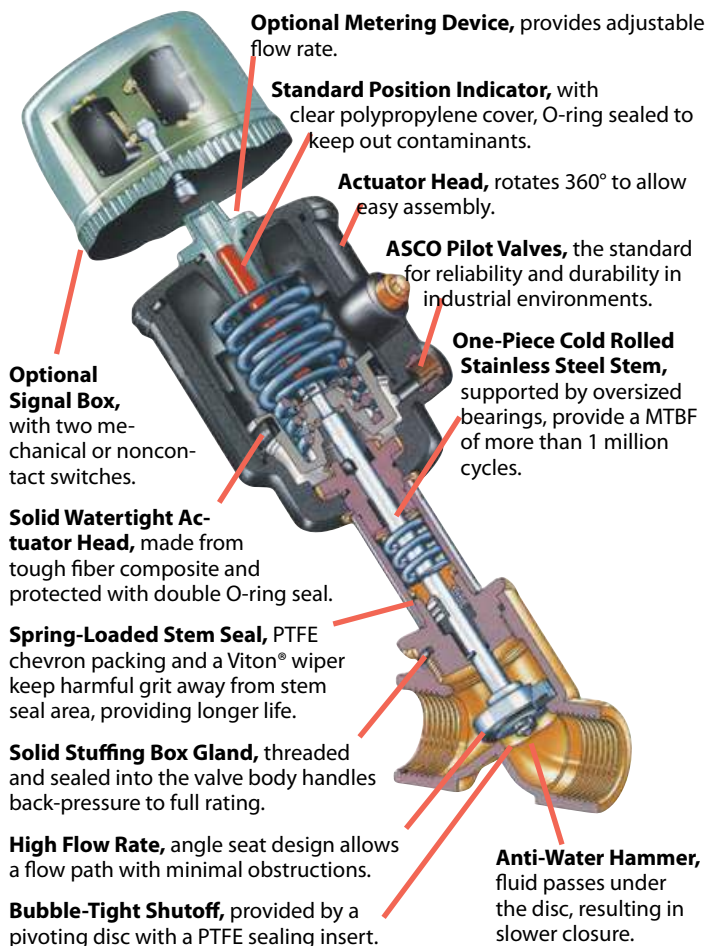
- NSF 61 Annex G drinking water system component
- NSF 169 special purpose food equipment
- NSF 42 drinking water treatment units
- NSF 372 drinking water system components (lead content certification).

Model Selection Guide

Composite Plastic Body – 120 volts AC / 60 Hz

Pipe Size (In.)	Orifice Size (In.)	Cv Flow Factor	Watt Rating/ Class of Coil Insulation	Solenoid Valve	
				Catalog Number	Price
Normally Closed (Closed when de-energized), Threaded Ends, NSF 372 Lead Content Certified					
1/2	3/4	4.5	6.9/F	8212A519L1100F0	\$130.00
3/4	3/4	7.0	6.9/F	8212A537L1100F0	155.00
Normally Open (Open when de-energized), Threaded Ends, NSF 372 Lead Content Certified					
1/2	3/4	4.5	10/F	8212A520L1100F2	236.00
3/4	3/4	7.0	10/F	8212A538L1100F2	246.00

Severe Duty Piston Valves 8290 Series



The Toughest Valve Available

You wouldn't think of putting a solenoid valve where this valve likes to operate! Give this valve any application where you have an actuated ball valve now, and watch it thrive. Put it where you have pipes clanking with the infamous sounds of water hammer, and listen to the quiet. It just loves places where you have suspended solids running through your lines.

There's no diaphragm to rip, no expensive actuator to attach to a cheap ball valve, and best of all, it requires almost no maintenance! It's called the suspended solids valve because it handles nearly anything you can think of flowing.

How many times have you found yourself rebuilding a solenoid valve because the diaphragm ripped . . . or worse, it just stopped operating? The 8290 solves the problem by combining the reliability of actuated ball valves with the simplicity of a solenoid, for a truly economical solution!

The simple design builds reliability into a valve that operates well in harsh applications. It also allows very high flow coefficients when compared to solenoid valves of the same size. Anti-water-hammer is inherent, making this valve great for stopping the flow of any liquid. Imagine . . . no longer worrying about pipes jarring themselves off the walls!

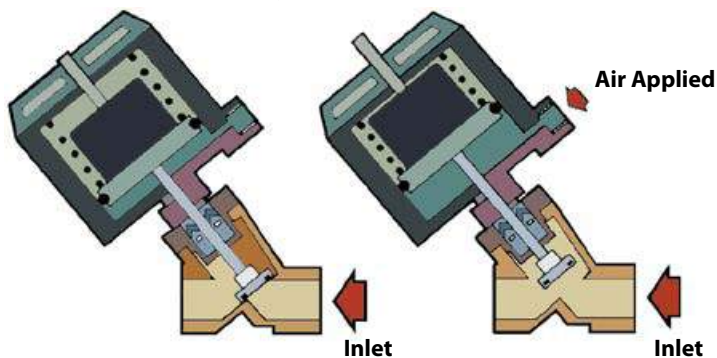
Available in both forged brass and stainless steel, you can match the material of the valve to the corrosiveness of your media. Choose either normally open or normally closed operation, in sizes from 1/2" to 2" NPT connections.

How the Piston Valve Works

The 8290 Series Piston Valves are air actuated on-off (two-position) valves. The air actuated piston moves the plug and stem assembly up or down (open or closed). A small 1/8" NPT three-way solenoid valve is used as a pilot valve to supply the air to the valve, just like an air actuated ball valve.

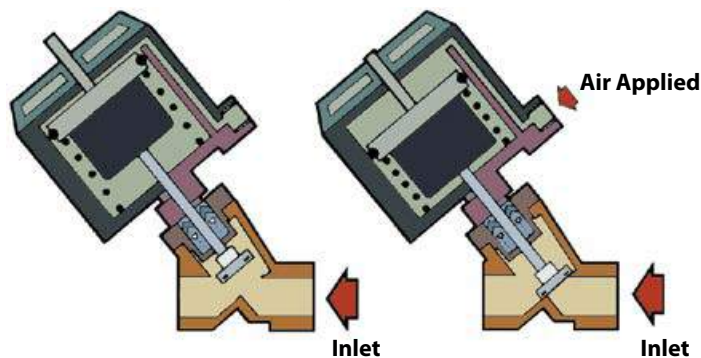
The pressure required for the pilot valve can be between 60 and 100 PSI. Piston valve must be specified as normally open or closed. For a 1/8" NPT three-way solenoid valve, we suggest ASCO's U8325A1V (order separately).

Normally Closed Operation



When air is applied to the pilot port, the plug and stem assembly move up off the seat. When the air pressure is removed, the spring returns the valve to the closed position and flow stops.

Normally Open Operation



When air is applied to the pilot port, the plug and stem assembly move down onto the seat. When the air pressure is removed, the spring returns the valve to the open position and flow resumes.



These auxiliary-piloted two-way angle-body piston valves feature an extra stable shaft with oversized bearings for extended service life — tested to more than 1 million cycles.

A preloaded stem seal and Viton shaft wiper allow these valves to be used in aggressive and corrosive services. The watertight actuator head is double-walled for superior strength. Fluid passes under the valve seat to eliminate damaging water hammer. The valves can handle back pressure to their full rating. A reversed flow version for rapid cycling steam use is also available.

Specifications

- Temperature:** Fluid: 15°–366° F; Ambient: 15°–150° F
- Differential Pressure:** Fluid: 0–240 PSI; Steam: 0–150 PSI
- Pressure:** Operating: 240 PSI max.; Pilot Range: 60–150 PSI
- Pilot Valve Cv:** 50mm/63mm Head: 0.06 (Recommended); 90mm: 0.1
- Pilot Fluids:** Filtered air or water
- Pilot Port:** 50mm/3mm Head: 1/8" NPT; 90mm: 1/4" NPT
- Installation:** Valves are mountable in any position
- Valve Parts in Contact with Media:** Body: Bronze or 316L stainless steel (SS); Stem: 303 SS; Stuffing Box: Brass or 303 SS; Disc: Brass or 303 SS; Seals: PTFE; Wiper Seal: Viton; Actuator: Fiberglass reinforced polyamide (PA+FV)

Model Selection Guide

Size (In.)		Max. Pressure (PSI)		Cv Flow	Catalog Number* and Price (by Material)				
Pipe	Orifice	Fluid	Steam	Factor	Bronze		316L S.S.		
50mm Head — Normally Closed (Entry Under Disc)									
1/2	1/2	240	150	5.7	8290A384	\$185.00	8290A393	\$302.00	
3/4	3/4	150	150	11	8290A385	193.00	8290A394	323.00	
1	1	90	90	15	8290A386	214.00	8290A395	358.00	
50mm Head — Normally Open (Entry Under Disc)									
1/2	1/2	240	150	5.6	8290A387	185.00	8290A396	302.00	
3/4	3/4	240	150	11	8290A388	193.00	8290A397	314.00	
1	1	240	150	19	8290A389	214.00	8290A398	358.00	
50mm Head — Normally Closed (Entry Above Disc): Rapid Cycling Steam Use									
1/2	1/2	150	150	5.6	8290A390	198.00	8290A399	264.00	
3/4	3/4	150	150	11	8290A391	210.00	8290A400	311.00	
1	1	150	150	19	8290A392	216.00	8290A401	309.00	
63mm Head — Normally Closed (Entry Under Disc)									
3/4	3/4	240	150	11	8290B005	232.00	8290B048	380.00	
1	1	150	150	19	8290B010	244.00	8290B053	459.00	
1 1/4	1 1/4	90	90	25	8290A016	343.00	8290A059	646.00	
1 1/2	1 1/2	60	60	45	8290A020	371.00	8290A063	774.00	
2	2	40	40	63	8290A024	428.00	8290A067	812.00	
63mm Head — Normally Open (Entry Under Disc)									
3/4	3/4	240	150	11	8290B027	232.00	8290B070	380.00	
1	1	240	150	19	8290B028	244.00	8290B071	343.00	
1 1/4	1 1/4	240	150	25	8290A030	343.00	8290A073	725.00	
1 1/2	1 1/2	160	150	45	8290A032	371.00	8290A075	771.00	
2	2	105	105	63	8290A034	428.00	8290A077	812.00	
63mm Head — Normally Closed (Entry Above Disc): Rapid Cycling Steam Use									
3/4	3/4	150	150	11	8290B037	246.00	8290B080	409.00	
1	1	150	150	19	8290B038	261.00	8290B081	488.00	
90mm Head — Normally Closed (Entry Under Disc)									
1	1	240	150	19	8290B011	371.00	8290B054	609.00	
1 1/4	1 1/4	180	150	25	8290A017	486.00	8290A060	785.00	
1 1/2	1 1/2	120	120	45	8290A021	513.00	8290A064	913.00	
2	2	90	90	63	8290A025	545.00	8290A068	975.00	
90mm Head — Normally Open (Entry Under Disc)									
1	1	240	150	19	8290B029	326.00	8290B072	705.00	
1 1/4	1 1/4	240	150	25	8290A031	486.00	8290A074	869.00	
1 1/2	1 1/2	240	150	45	8290A033	513.00	8290A076	913.00	
2	2	90	150	63	8290A035	542.00	8290A078	975.00	

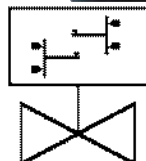
* Models above do not include the pilot valve. Call for pricing and delivery on assemblies.

Valve Positioner Indicator Signalling Unit

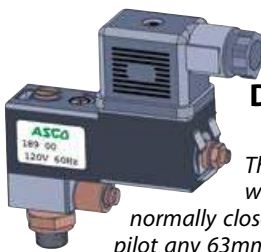
Fits all 8290 valves. Supplied as a kit with two mechanical switches, and mounts on top of the valve actuator in place of the standard unit.

As the valve cycles, cams on the signalling unit plunger operate the switches to provide electrical signalling of valve position. The unit has a polyamide body and transparent polymethylmentine cover.

Kit Number: 88529001
Price: \$531.00



Call for Optional Materials, Low Pressures, or Adapter Plates!

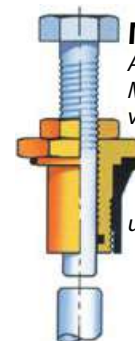


Direct Mount Pilot Valve

These special three-way direct-acting, normally closed pilot valves can pilot any 63mm-head Series 8290 valves. To order, use catalog numbers below, specifying the voltage.

Model Selection Guide

Size (In.)		Cv Flow Factor		Max. Press.	Catalog Number (by Voltage)		Price Each
Pipe	Orifice	1–2	2–3		24 VDC	120/60	
Direct Mount Pilot Valve — Speed Control on Port 3							
1/8	1/16	0.04	0.06	150 PSI	18900049-24/DC	18900049-120/60	\$127.50
Direct Mount Pilot Valve — No Speed Control on Port 3							
1/8	1/16	0.04	0.06	150 PSI	18900036-24/DC	18900036-120/60	112.50



Metering Device

Adjusts flow from 0% to 100%. Mounts on top of any 8290 series valve in place of the standard position indicator. For normally open or normally closed valves with fluid entry under the disk.

Kit Number: 88529003
Price: \$430.00

Dust Collector Solenoid Valves 8353 Series



Series 8353 diecast aluminum diaphragm-operated valves are specially designed for reverse jet-type dust collectors. High flow, long life, and fast opening combine to produce a superior design for dust collector systems.

Specifications

Solenoid Enclosures: Valves with integral solenoids in this series have Red-Hat II molded epoxy solenoids and are identified by the letter G in their catalog numbers, e.g., 8262G1V.

Standard Enclosures: *Red-Hat II:* Types 1-4, 3S, and 4X Combination General Purpose and Watertight.

Optional Enclosures: *Red-Hat II:* Types 3, 3S, 4, 4X, 6, 6P, 7, and 9 combination Explosion-proof and Watertight. To order, add prefix EF to catalog number. Additional constructions available are open frame solenoids and junction box.

Valve Parts in Contact with Fluids: *Body:* Die cast aluminum (<0.4% copper); *Seals:* Buna-N; *Diaphragms:* Buna-N, Hytrel, or Neoprene as noted; *Discs:* Buna-N or Nylon.

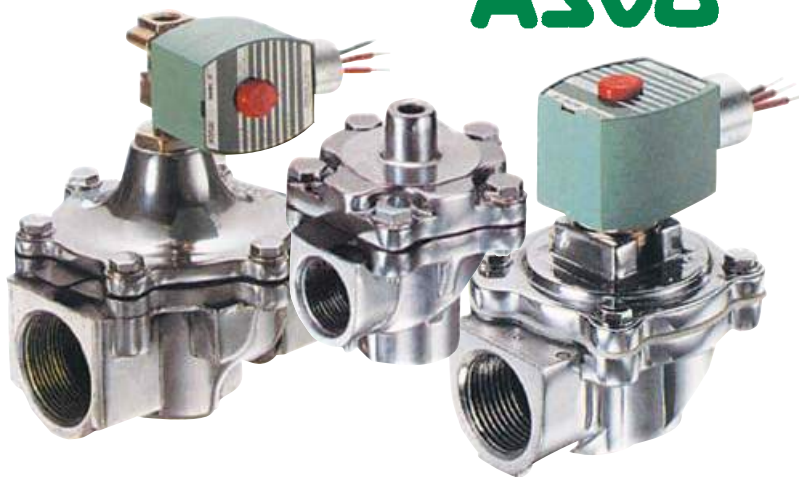
Coil: Continuous duty molded Class F.

Media: Air and inert gas.

Pressure: *Minimum:* 5 or 15 PSI. (*Neoprene diaphragm/nylon disc:* 15 PSI min.) *Maximum:* 125 PSI.

Ambient Temperature Ranges: *AC construction:* 0° to 180° F. 140° F max. for valves with Hytrel diaphragm. Call for DC constructions.

Fluid Temperature: 0° to 180°F max., except as noted. For temps to 250° F, specify Viton, suffix V except as noted otherwise.



Model Selection Guide

Pipe Size (In.)	Orifice Size (In.)	Operating Pressure Differential (PSI)		Cv Flow Factor	Max. Fluid Temp.	Watt Rating/ Class of Coil Insulation	Solenoid Valve		Repair Kit		Diaphragm Only 10-Pack "Zip" Kit	
		Required Minimum	Required Maximum				Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
Integral Pilot Standard Solenoid Enclosures (Red Hat II — Types 1, 2, 3, 3S, 4, and 4X)												
1	1 1/8	5	125	20	180°F	9.1/F	8353G041	\$118.00	314450	\$114.00		
1 1/2	1 1/2	15	125	35	180°F	17.1/F	8353G001	337.00	300144	200.00		
2	2	15	125	60	180°F	17.1/F	8353G002	404.00	300145	326.00		
Remote Pilot Construction (Minimum Pilot Valve Orifice Size 1/8")												
3/4	3/4	5	125	10.5	180°F	—	8353C033	67.00	096875	54.00	238864	\$480.00
3/4	3/4	5	125	10.5	180°F	—	8353C030	81.00	096875	54.00	238864	480.00
3/4	3/4	5	125	10.5	180°F	—	8353C004	76.00	096875	54.00	238864	480.00
1	1 1/8	5	125	20	140°F	—	8353C035	77.00	200262	62.00	238866	480.00
Standard Solenoid Enclosures (Red Hat: Type 1. Red Hat II – Types 1, 2, 3, 3S, 4, and 4X). Normally Closed (Closed when de-energized) Brass Body												
1/8	1/8	0	125	0.34	180°F	6.1/F	8262H002	48.00	302014	65.00		
Red Hat Panel Mount Solenoids with Spade Terminal Coils Standard. Normally Closed (Closed when de-energized) Brass Body. (Voltage: 120/60)												
1/8	1/8	0	125	0.34	180°F	6/F	PSF8262C002	125.00	302014	65.00		

8262 and 8266 Series 2-Way Fuel Oil Solenoid Valves

Specifications

Valve Parts in Contact with Fluids: *Body:* Brass; *Seals/Discs:* Buna-N, Viton, or stainless steel; *Core/Plugnut:* 430F SS; *Springs:* 302 SS; *Shading Coil:* Copper

Solenoid Enclosures: Valves in this series have Red-Hat metal solenoid enclosures or Red-Hat II molded epoxy solenoids. Red-Hat II solenoids are identified by the letter G in their catalog numbers, e.g., 8262G1V.

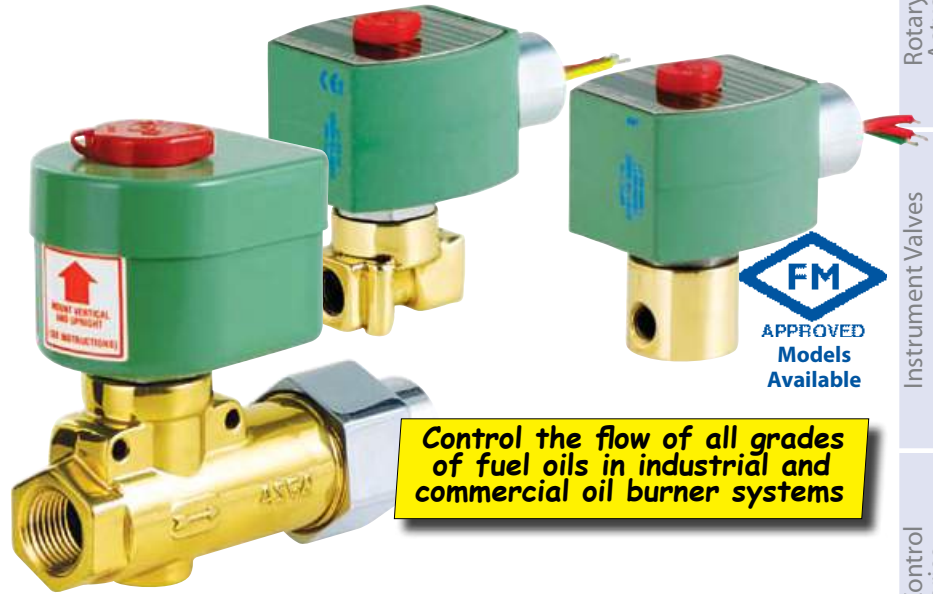
Standard Enclosures: *Red-Hat:* Type 1 General Purpose; *Red-Hat II:* Types 1–4, 3S, and 4X combination General Purpose, Watertight.

Optional Enclosures: *Red-Hat:* Type 3R Rainproof. To order, add prefix R to catalog number. *Red-Hat:* Types 3, 4, 7, and 9 combination Explosion-proof and Watertight. *Red-Hat II:* Types 3, 3S, 4, 4X, 6, 6P, 7, and 9 combination Explosion-proof and Watertight. To order, add prefix EF to catalog number. Call for price and availability.

Ambient Temperature Ranges: *Series 8262 and 8263:* Suitable for 32° to 125° F. *Series 8266:* Suitable for 32° to 122° F.

Electrical: *Standard Voltage:* 24, 120, 240, 480 volts AC, 60 Hz; Call for DC voltages, price, and availability.

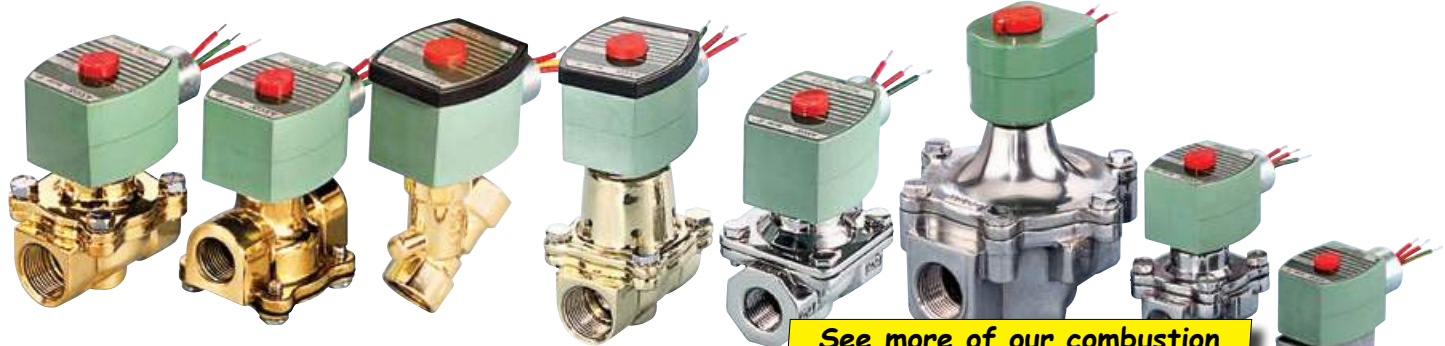
Coil: Continuous duty molded Class F.



Model Selection Guide

Pipe Size (In.)	Orifice Size (In.)	Operating Pressure Differential (PSI)		Cv Flow Factor	Max. Fluid Temp.	Approvals		Watt Rating/Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
		#2 Fuel Oil 60SSU	#4 Fuel Oil 300SSU			UL	FM		Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
Normally Closed (Closed when de-energized) Brass Body with Viton Seating														
1/8	3/32	0–360	0–300	0.20	180°F	°	°	9.1/F	8262H011V	\$66.00	302014V	\$63.00	238210-132-D	\$103.00
1/8	1/8	0–190	0–140	0.34	180°F	°	°	6.1/F	8262H002V	52.00	302014V	63.00	238210-032-D	84.00
1/4	7/32	0–100	0–100	0.85	200°F	°	°	17.1/F	8262H208V	74.00	304354V	51.00	238610-032-D	93.00
		#2/#4 Light Oil	#5/#6 Heavy Oil											
Normally Closed (Closed when de-energized) (Shutoff) Without Bypass — Brass Body with Viton Seating														
3/8	1/8	0–400	0–350	0.34	250°F	°	°	15.4/F	8266D001V	310.00	304097V	248.00	099257-001-D	122.00
3/8	1/4	0–110	0–100	1.2	250°F	°	°	15.4/F	8266D023V	310.00	304099V	248.00	099257-001-D	122.00
1/2	1/8	0–400	0–350	0.34	250°F	°	°	15.4/F	8266D047V	323.00	304097V	248.00	099257-001-D	122.00
1/2	3/16	0–200	0–175	0.68	250°F	°	°	15.4/F	8266D053V	323.00	304098V	257.00	099257-001-D	122.00
1/2	3/16	0–300	0–250	0.68	225°F	°	°	20/F	8266D057V	353.00	304098V	257.00	099257-001-D	122.00
1/2	13/64	0–170	0–140	0.78	250°F	°	°	15.4/F	8266D061V	323.00	304100V	258.00	099257-001-D	122.00
1/2	1/4	0–110	0–100	1.2	250°F	°	°	15.4/F	8266D069V	323.00	304099V	248.00	099257-001-D	122.00
1/2	5/16	0–70	0–70	1.8	250°F	°	°	15.4/F	8266D077V	323.00	304101V	258.00	099257-001-D	122.00
1/2	3/8	0–40	0–35	2.5	250°F	°	°	15.4/F	8266D085V	323.00	304102V	258.00	099257-001-D	122.00
Normally Open (Open when de-energized) Without Bypass — Brass Body with Viton Seating														
3/8	1/8	0–425	0–400	0.34	250°F	°	—	15.4/F	8266D101V	391.00	—	—	099257-001-D	122.00
3/8	1/4	0–90	0–75	1.2	250°F	°	—	15.4/F	8266D123V	391.00	304106V	313.00	099257-001-D	122.00
1/2	3/16	0–160	0–150	0.68	250°F	°	—	15.4/F	8266D153V	392.00	304104V	314.00	099257-001-D	122.00
1/2	13/64	0–130	0–125	0.78	250°F	°	—	15.4/F	8266D161V	392.00	304105V	314.00	099257-001-D	122.00
1/2	1/4	0–90	0–75	1.2	250°F	°	—	15.4/F	8266D169V	392.00	304106V	313.00	099257-001-D	122.00
Normally Closed (Closed when de-energized) (Shutoff) With 1/2" NPT Bypass — Brass Body with Viton Seating														
3/4	3/8	0–75	0–70	2.5	225°F	°	°	20/F	8266C247V	1401.00	304102V	258.00	099257-001-D	122.00
Normally Closed (Closed when de-energized) (Shutoff) Without Bypass — Brass Body with Stainless Steel Seating														
3/8	1/4	0–110	0–100	1.2	250°F	°	°	15.4/F	8266D023L	315.00	304099L	252.00	099257-001-D	122.00
1/2	1/4	0–110	0–100	1.2	250°F	°	°	15.4/F	8266D069L	328.00	304099L	252.00	099257-001-D	122.00
1/2	5/16	0–70	0–70	1.8	250°F	°	°	15.4/F	8266D077L	328.00	304101L	264.00	099257-001-D	122.00
1/2	3/8	0–40	0–35	2.5	250°F	°	°	15.4/F	8266D085L	328.00	304102L	264.00	099257-001-D	122.00
Normally Open (Open when de-energized) Without Bypass — Brass Body with Stainless Steel Seating														
1/2	1/4	0–90	0–75	1.2	250°F	°	—	15.4/F	8266D169L	397.00	—	—	099257-001-D	122.00

Solenoid Valves for Combustion Systems



See more of our combustion control and flame safety offering starting on page 257.

Comparing ASCO Combustion Valves



	8030	8040	8210	8214	8215	8262
Valve Parts In Contact with Fluids	Brass body 305 SS core tube NBR seals/disc 430F SS core/plugnut Copper shading coil 302 SS springs	Aluminum body 305 SS core tube NBR seals/disc 430F SS core/plugnut Copper shading coil 302 SS springs Zinc-plated steel pipe plug	Brass body 305 SS core tube NBR seals/disc 430F SS core/plugnut Copper shading coil	Aluminum body 305 SS core tube NBR seals/disc 430F SS core/plugnut Copper shading coil 302 SS springs Zinc-plated steel pipe plug	Aluminum body 305 SS core tube NBR seals/disc/ diaphragm 430F SS core/plugnut 302 SS or 17-7 PH springs Copper shading coil CA core guide 305 SS core tube	Brass body 305 SS core tube NBR seals/disc 430F SS core/plugnut Copper shading coil Inconel 600 springs Acetal core guide PTFE rider ring
Approvals	UL, FM, CSA	UL, CSA, FM (3/8" to 3/4" only)	UL, FM, CSA	UL, FM, CSA	UL, CSA, FM (except 8215A090 and 8215A040)	UL, FM, CSA

Model Selection Guide

120 volts AC/60 Hz — All Valves Shown Here are Normally Closed (Closed when De-Energized), Suitable for Use in Fluids to Maximum Temperatures 125°F

Pipe Size	Orifice Size	Cv Flow Factor	Gas Capacity BTU/Hr	Operating Pressure Differential (PSI)		Watt Rating/ Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
				Min.	Max.		Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
Direct Acting Gas Shutoff Valves												
1/8"	5/16"	1	53,700	0	15	6.1/F	8040H006	\$72.00	318247	\$58.00	238210-032-D	\$84.00
1/4"	5/16"	1.1	59,000	0	15	10.1/F	8040H007	73.00	318247	58.00	238210-032-D	84.00
3/8"	3/8"	1.8	97,000	0	15	10.1/F	8030G068	177.00	306628	131.00	238610-032-D	93.00
1/2"	7/16"	2.8	151,000	0	8	10.1/F	8030G069	180.00	306629	145.00	238610-032-D	93.00
1/2"	3/4"	5.4	291,000	0	2	10.1/F	8040G022	144.00	306633	78.00	238610-032-D	93.00
3/4"	3/4"	9.5	512,000	0	2	10.1/F	8040G023	145.00	306633	78.00	238610-032-D	93.00
1"	1-5/8"	16.8	900,000	0	0.5	15.4/F	8040C004	178.00	304079	130.00	099257-001-D	122.00
Pilot Operated Gas Shutoff Valves												
3/8"	5/8"	2.8	150,000	0	50	10.1/F	8210G074	191.00	304076	152.00	238610-032-D	93.00
3/8"	3/4"	3.4	183,000	0	50	10.1/F	8215G010	153.00	302350	123.00	238610-032-D	93.00
1/2"	5/8"	3.6	193,000	0	50	10.1/F	8210G075	191.00	304076	152.00	238610-032-D	93.00
1/2"	3/4"	4.4	238,500	0	50	10.1/F	8215G020	153.00	302350	123.00	238610-032-D	93.00
3/4"	5/8"	5.0	295,000	0	50	10.1/F	8210G076	211.00	304076	152.00	238610-032-D	93.00
3/4"	3/4"	5.1	247,500	0	50	10.1/F	8215G030	159.00	302350	123.00	238610-032-D	93.00
3/4"	1-5/8"	11	580,000	0	50	15.4/F	8215 135	297.00	302352	230.00	099257-001-D	122.00
1"	1-5/8"	21	1,119,000	0	25	15.4/F	8215B050	287.00	302352	230.00	099257-001-D	122.00
1-1/4"	1-5/8"	32	1,730,000	0	25	15.4/F	8215B060	287.00	302352	230.00	099257-001-D	122.00
1-1/2"	1-5/8"	35	1,900,000	0	25	15.4/F	8215B070	332.00	302352	230.00	099257-001-D	122.00
2"	2-3/32"	60	3,251,000	0	25	15.4/F	8215B080	489.00	302353	293.00	099257-001-D	122.00
2-1/2"	3"	117	5,821,000	0	5	28.2/F	8215A090	741.00	302354	452.00	206409-011-D	292.00
3"	3"	138	7,430,000	0	5	28.2/F	8215A040	951.00	302354	452.00	206409-011-D	292.00
Gas Shutoff Valves with Waterproof Enclosures												
3/8"	3/4"	3.4	183,000	0	5	17.1/F	8214G010	151.00	316233	121.00	238610-132-D	115.00
1/2"	3/4"	4.4	238,500	0	5	17.1/F	8214G020	151.00	316233	121.00	238610-132-D	115.00
3/4"	3/4"	5.1	247,500	0	5	17.1/F	8214G030	155.00	316233	121.00	238610-132-D	115.00

Rotary and Smart Actuator Motors
 Instrument Valves
 Process Control Accessories
 Pressure and Temperature Switches
 ASCO Solenoid Valves
 Pressure Gauges



8214 Series 2-Way Gas Shutoff Valves

Features

- Unique double disc design with overtravel provides redundant sealing for leak tight shutoff
- FM approved as safety shutoff valve with visual indicator and proof-of-closure switch options (Suffix "VI" & "C")
- Zero differential piloted diaphragm
- For on-off control of fuel gas in commercial and industrial gas burners
- Valves provided with 1/8" NPT upstream and downstream pipe taps with plugs for routine testing
- Optional flange adapters for ease of installation and service
- Modular design for flexibility to configure double solenoid gas train with a small footprint
- Low ambient operating temperature range — valves can be installed in frigid environments as low as -40° C/F

Specifications

Construction: *Body:* Aluminum; *Seals and disc:* NBR; *Core tube:* 305 stainless steel; *Core guide:* Acetal; *Rider ring:* PTFE; *Core and plugnut:* 430F SS; *Springs:* 302 SS; *Shading coil:* Copper; *Pipe plug:* Zinc-plated steel

Standard Voltages: 24, 120, 240 VAC, 60 Hz (or 110, 200 VAC, 50 Hz); 12, 24 VDC; Visual indicator and Proof-of-Closure switch only available on AC constructions

General Purpose Solenoid Enclosures: RedHat metal Type 1; General Purpose housing has a 7/8" diameter hole to accept standard conduit hubs or connectors. Add prefix JB to catalog number for a Junction Box construction with two 7/8" diameter knockouts. (i.e. JB8214 265)



FM approved as safety shutoff valve when ordered with optional visual indication or proof-of-closure switch.

Watertight Solenoid Enclosures: RedHat II molded epoxy Type 1, 2, 3, 3S, 4 and 4X combination. General Purpose and Watertight solenoid enclosures with 1/2" conduit hub as standard. Add prefix JKP to Watertight catalog number for a Watertight Junction Box. (i.e. JKP8214G266)

Valve Response Time: *Opening Time:* <1 second; *Closing Time:* <1 second

Approvals: *UL Listed:* Standard 429 "Electrically Operated Valves," Guide YIOZ, File MP618 Safety Shutoff Valves. *FM Approved:* Class 7400 "liquid and gas safety shutoff valves" when ordered with C, VI options. *CSA Certified:* Standard C22.2 No. 139 "Electrically Operated Valves," File 010381. Automatic Gas Valves Z21.21 (6.5), C/I, File 112872. 3) Automatic Gas Safety Shutoff Valves (3.9), File 112872.

Model Selection Guide

120 volts AC/60 Hz — All Valves Shown Here are Normally Closed (Closed when De-Energized), Suitable for Use in Fluids to Maximum Temperatures 125°F

Pipe Size	Orifice Size	Cv Flow Factor	Gas Capacity BTU/Hr	Operating Pressure Differential (PSI)		Watt Rating/ Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil		
				Min.	Max.		Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each	
Two-Way, Normally Closed General Purpose Gas Valves (UL, CSA Approved as Safety Shutoff Valves)													
1 1/4"	2 3/32"	36	1,925,000	0	5	20/F	8214 265	\$334.00	323499	Call	099257-005-D	\$162.00	
1 1/2"	2 3/32"	45	2,406,000	0	5	20/F	8214 275	439.00	323499	Call	099257-005-D	162.00	
2	2/32"	55	2,940,500	0	5	20/F	8214 280	521.00	323499	Call	099257-005-D	162.00	
Two-Way, Normally Closed Watertight Gas Valves (UL, CSA Approved as Safety Shutoff Valves). Only available in AC voltages.													
1 1/4"	2 3/32"	36	1,925,000	0	5	20/F	8214G266	334.00	323538	Call	272610-132-D	121.00	
1 1/2"	2 3/32"	45	2,406,000	0	5	20/F	8214G276	439.00	323538	Call	272610-132-D	121.00	
2	2/32"	55	2,940,500	0	5	20/F	8214G281	521.00	323538	Call	272610-132-D	121.00	
Options and Accessories (For AC voltages only)		Visual indication of open and shut position (Add for FM-Approved safety shutoff valve) 1 Amp proof of closure switch (Add for FM-Approved safety shutoff valve)									Suffix VI Suffix C		104.00 405.00

General Service 3-Way Solenoid Valves 8314 Series



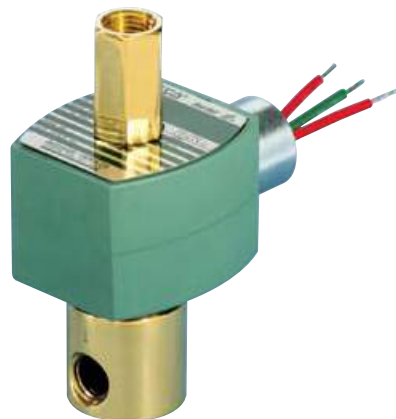
Specifications

Nominal Ambient Temperature: AC Units: 32° to 125° F. DC Units: 32° to 104° F.

Valve Parts in Contact with Fluids: Body: Brass or 303 S.S.; Seals and Discs: Buna-N and Nylon; Core Tube: 305 S.S.; Core and Plugnut: 430F S.S.; Core Springs: 302 S.S. and 17-7PH S.S.; Shading Coil: Copper (brass body); Silver (stainless steel body); Core Guide: Acetal (all AC valves and 1/8" orifice N/O DC valves)

Solenoid Enclosures: Valves in this series have Red-Hat II molded epoxy solenoids and are identified by the letter G in their catalog numbers, e.g., 8314G41.

Standard Enclosures: Red-Hat II: Types 1-4, 3S, and 4X Combination General Purpose and Watertight.



Optional Enclosures: Red-Hat II: Types 3, 3S, 4, 4X, 6, 6P, 7 and 9 Combination Explosion-proof and Watertight.

Additional constructions are available. Call for optional open frame solenoids, junction box enclosures, or panel mount constructions.

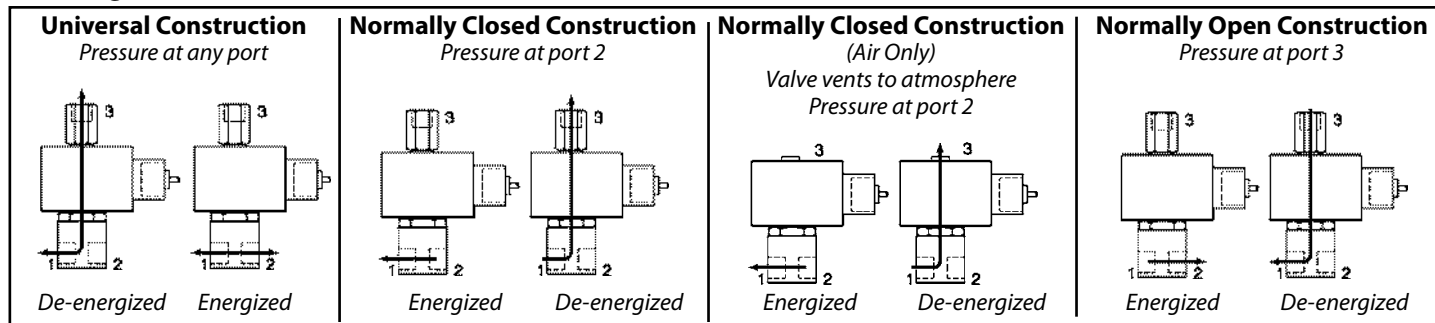
Electrical: Standard Voltage: 120VAC, 60Hz; Other voltages available: 24, 240, 480 VAC, 60 Hz (or 110, 220 VAC, 50 Hz); 6, 12, 24, 120, 240 VDC.

Coil: Continuous duty molded Class F. Coils shown: 120VAC, 60Hz.

Approvals: CSA certified. All are UL listed general purpose valves.

Kits: Include all internal parts that may require replacement in normal service: solenoid base subassembly, cores, resilient discs, seats, springs and all gaskets. Installation/maintenance sheets are included, to simplify installation. Replacement coils must be ordered separately.

Flow Diagrams



Model Selection Guide

Brass Body – 120 volts AC / 60 Hz

(Also Available in Stainless Steel. Please Call.)

Pipe Size (In.)	Orifice Size (In.)	Maximum Operating Pressure (PSI)			Cv Flow Factor	Max. Fluid Temp.	Watt Rating Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
		Air/ Inert Gas	Water	Light Oil 45SSU				Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
Universal Operation – Apply pressure at any port													
1/8	3/64	160	160	160	0.04	200°F	10.1/F	8314H041	\$132.00	314476	\$107.00	238610-032-D	\$93.00
1/4	3/64	160	160	160	0.04	200°F	10.1/F	8314H006	129.00	314476	107.00	238610-032-D	93.00
1/4	3/32	80	40	40	0.15	200°F	10.1/F	8314H007	132.00	314456	122.00	238610-032-D	93.00
1/4	1/8	45	25	25	0.25	200°F	10.1/F	8314H008	144.00	314477	138.00	238610-032-D	93.00
Normally Closed (Closed when de-energized)													
1/4	1/8	75	60	60	0.25	200°F	10.1/F	8314H036	144.00	314480	122.00	238610-032-D	93.00
Normally Closed (Closed when de-energized) – Air only, Exhaust to atmosphere													
1/4	3/32	150	—	—	0.15	200°F	10.1/F	8314G023	130.00	302870	104.00	238610-032-D	93.00

8320 Series General Service 3-Way Solenoid Valves

Specifications

Nominal Ambient Temperature Ranges: AC Construction: 32° to 125° F; DC Construction: 32° to 104° F.

Valve Parts in Contact with Fluids: Body: Brass or 303 S.S.; Seals and Discs: Buna-N or Cast Urethane; Core Tube: 305 S.S.; Core and Plugnut: 430F S.S.; Core Springs: 302 S.S.; Shading Coil: Copper (brass body); Silver (stainless steel body); Disc Holder: Acetal; Core Guide: Acetal (10.1 and 17.1 watt only)

Coil: Continuous duty molded Class F; Coils shown: 120VAC, 60Hz.

Electrical: Standard Voltage: 120 VAC, 60 Hz; Other voltages available: 24, 240, 480 VAC, 60 Hz (or 110, 220 VAC, 50 Hz); 6, 12, 24, 120, 240 VDC.

Solenoid Enclosures: Valves in this series have Red-Hat II molded epoxy solenoids and are identified by the letter G in their catalog numbers, e.g., 8320G130.

Standard Enclosures: Red-Hat II: Types 1–4, 3S and 4X Combination General Purpose and Watertight

Optional Enclosures: Red-Hat II: Types 3, 3S, 4, 4X, 6, 6P, 7 and 9 Combination Explosion-proof and Watertight. To order, add prefix EF to catalog number and call for price and availability.

Additional constructions are available.

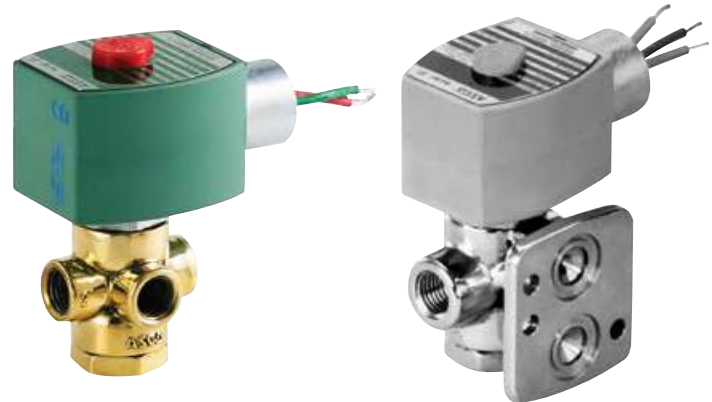
Approvals: CSA certified. UL listed General Purpose Valves.

Model Selection Guide

Brass Body – 120 volts AC / 60 Hz

Pipe Size (In.)	Orifice Size (In.)	Maximum Operating Pressure (PSI)			Cv Flow Factor	Max. Fluid Temp.	Watt Rating Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
		Air/ Inert Gas	Water	Light Oil 45SSU				Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
Universal Operation – Apply pressure at any port													
1/8	3/64	175	175	175	0.06	140°F	9.1/F	8320G130	\$107.00	302084	\$80.00	238210-132-D	\$103.00
1/8	1/16	100	100	100	0.09	180°F	9.1/F	8320G001	97.00	302088	57.00	238210-132-D	103.00
1/8	3/32	50	50	50	0.12	180°F	6.1/F	8320G083	91.00	302092	57.00	238210-032-D	84.00
1/8	1/8	30	30	30	0.21	180°F	9.1/F	8320G003	100.00	302096	79.00	238210-132-D	103.00
1/4	1/16	125	130	130	0.09	200°F	10.1/F	8320G172	122.00	302114	94.00	238610-032-D	93.00
1/4	3/32	100	100	100	0.12	200°F	17.1/F	8320G174	122.00	302116	94.00	238610-132-D	115.00
1/4	1/8	50	50	50	0.25	200°F	17.1/F	8320G176	118.00	302116	94.00	238610-132-D	115.00
1/4	11/64	20	20	20	0.35	200°F	10.1/F	8320G178	127.00	302118	101.00	238610-032-D	93.00
Normally Closed (Closed when de-energized)													
1/8	3/64	200	200	200	0.06	180°F	6.1/F	8320G132	100.00	302120	64.00	238210-032-D	84.00
1/8	1/16	150	125	125	0.09	180°F	6.1/F	8320G013	87.00	302120	64.00	238210-032-D	84.00
1/8	3/32	100	100	100	0.12	180°F	6.1/F	8320G015	88.00	302120	64.00	238210-032-D	84.00
1/8	1/8	40	40	40	0.21	180°F	6.1/F	8320G017	100.00	302128	79.00	238210-032-D	84.00
1/4	1/16	210	225	225	0.09	200°F	17.1/F	8320G182	152.00	302141	93.00	238610-132-D	115.00
1/4	3/32	150	150	150	0.12	200°F	10.1/F	8320G184	122.00	302142	93.00	238610-032-D	93.00
1/4	1/8	75	85	85	0.25	200°F	10.1/F	8320G186	127.00	302143	101.00	238610-032-D	93.00
1/4	11/64	45	45	45	0.35	200°F	10.1/F	8320G188	127.00	302144	101.00	238610-032-D	93.00
Normally Open (Open when de-energized)													
1/8	3/64	200	200	200	0.06	180°F	6.1/F	8320G136	91.00	302156	64.00	238210-032-D	84.00
1/8	3/32	100	100	100	0.12	180°F	6.1/F	8320G029	91.00	302156	64.00	238210-032-D	84.00
1/4	1/16	235	250	250	0.09	200°F	17.1/F	8320G192	152.00	302183	95.00	238610-132-D	115.00
1/4	3/32	150	140	140	0.12	200°F	10.1/F	8320G194	122.00	302184	95.00	238610-032-D	93.00
1/4	11/64	40	40	40	0.35	200°F	10.1/F	8320G198	127.00	302185	101.00	238610-032-D	93.00
Normally Closed (Closed when de-energized). NAMUR interface for mounting directly to spring return actuators													
1/4	1/16	150	–	–	0.09	180°F	6.1/F	8320G701	90.00	318814	72.00	238210-032-D	84.00
1/4	1/16	210	–	–	0.09	200°F	17.1/F	8320G703	128.00	318816	102.00	238610-132-D	115.00
1/4	3/32	100	–	–	0.12	180°F	6.1/F	8320G702	90.00	318814	72.00	238210-032-D	84.00
1/4	3/32	150	–	–	0.12	200°F	10.1/F	8320G704	125.00	318818	99.00	238610-032-D	93.00
1/4	3/8	100	–	–	0.21	200°F	17.1/F	8320G705	128.00	318816	102.00	238610-132-D	115.00

Valves also available in stainless steel.



Kits: Include all internal parts that may require replacement in normal service: solenoid base subassembly, cores, resilient discs, seats, springs and all gaskets. Installation/maintenance sheets are included. Replacement coils must be ordered separately.

(Also Available in Stainless Steel. Please Call.)

Air and Water 3-Way Solenoid Valves *8316 Series*



Specifications

Nominal Ambient Temperature Ranges: AC Units: 32° to 125° F; DC Units: 32° to 104° F.

Valve Parts in Contact with Fluids: Body: Brass; Seals and Discs: Buna-N; Diaphragm Assembly: Buna-N with Brass and Stainless Steel trim; Core Tube: 305 S.S.; Core and Plugnut: 430F S.S.; Core Springs: 302 S.S. and 17-7PH S.S.; Shading Coil: Copper; Pilot Seat Cartridge/ Disc Holder: Acetal

Electrical: Standard Voltage: 120 VAC, 60 Hz; Other voltages available: 24, 240, 480 VAC, 60 Hz (or 110, 220 VAC, 50 Hz); 6, 12, 24, 120, 240 VDC.

Coil: Continuous duty molded Class F

Solenoid Enclosures: Valves in this series have Red-Hat II molded epoxy solenoids and are identified by the letter G in their catalog numbers, e.g., 8316G54.

Standard Enclosures: Red-Hat II: Types 1-4, 3S, and 4X Combination General Purpose and Watertight

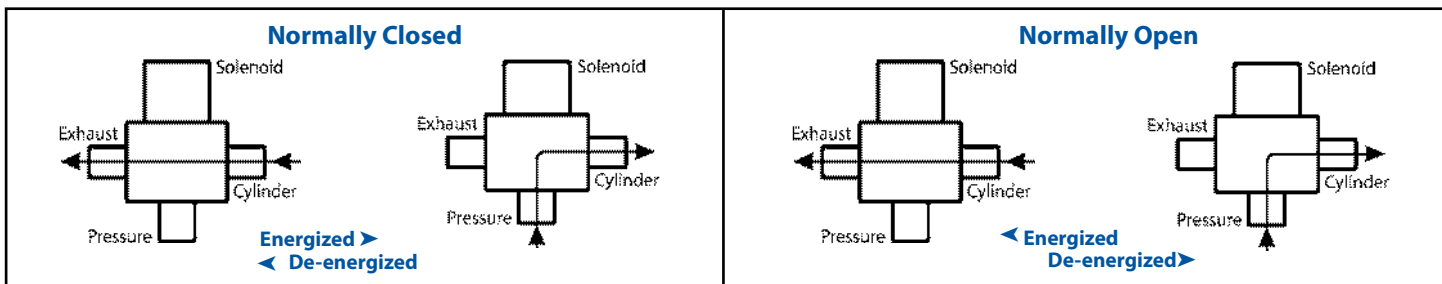
Optional Enclosures: Red-Hat II: Types 3, 3S, 4, 4X, 6, 6P, 7 and 9 Combination Explosion-proof and Watertight. To order, add prefix EF to catalog number and call for price and availability. Additional constructions are available.

Approvals: CSA certified.

Kits: Include all internal parts that may require replacement in normal service: solenoid base subassembly, cores, resilient discs, seats, springs and all gaskets. Installation/maintenance sheets included. Replacement coils must be ordered separately.

Important: A minimum operating pressure differential must be maintained between pressure and exhaust ports. Supply and exhaust piping must be full area, unrestricted. ASCO flow controls and similar components must be installed in cylinder lines only

Flow Diagrams



Model Selection Guide

Brass Body – 120 volts AC / 60 Hz

(Also Available in Stainless Steel. Please Call.)

Pipe Size (In.)	Orifice Size (In.)	Operating Pressure Differential (PSI)			Cv Flow Factor	Max. Fluid Temp.	Watt Rating/ Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
		Min. Press. Req'd.	Air/ Inert Gas	Water				Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
Normally Closed (Closed when de-energized)													
3/8	5/8	10	150	125	3	180°F	6.1/F	8316G054	\$348.00	314491	\$266.00	238210-032-D	\$84.00
3/8	5/8	10	250	250	3	180°F	17.1/F	8316G014	373.00	314495	257.00	238610-132-D	115.00
1/2	5/8	10	150	125	4	180°F	6.1/F	8316G064	354.00	314491	266.00	238210-032-D	84.00
1/2	5/8	10	250	250	4	180°F	17.1/F	8316G024	409.00	314495	257.00	238610-132-D	115.00
3/4	11/16	10	150	125	5.5	180°F	6.1/F	8316G074	575.00	314491	266.00	238610-032-D	93.00
3/4	11/16	10	250	250	5.5	180°F	17.1/F	8316G044	601.00	314495	257.00	238610-132-D	115.00
1	1	10	150	125	13	180°F	6.1/F	8316G034	742.00	302661	239.00	238210-032-D	84.00
Normally Open (Open when de-energized)													
3/8	5/8	10	150	125	3	180°F	6.1/F	8316G056	349.00	314492	222.00	238210-032-D	84.00
3/8	5/8	10	250	250	3	180°F	17.1/F	8316G016	370.00	314496	251.00	238610-132-D	115.00
1/2	5/8	10	150	125	4	180°F	6.1/F	8316G066	351.00	314492	222.00	238210-032-D	84.00
1/2	5/8	10	250	250	4	180°F	17.1/F	8316G026	408.00	314496	251.00	238610-132-D	115.00
3/4	11/16	10	150	125	5.5	180°F	6.1/F	8316G076	575.00	314492	222.00	238210-032-D	84.00

Rotary and Smart Actuator Motors

Instrument Valves

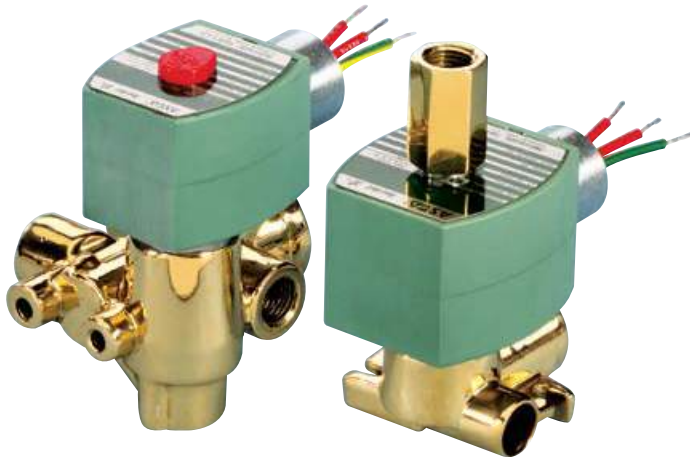
Process Control Accessories

Pressure and Temperature Switches

ASCO Solenoid Valves

Pressure Gauges

8317/8321 Series Quick Exhaust 3-Way Solenoid Valves



Specifications

Nominal Ambient Temperature Ranges: AC Construction: 32° to 125° F; DC Construction: 32° to 104° F.

Valve Parts in Contact with Fluids: Body: Brass or 304 S.S.; Seals and Discs: Buna-N; Nylon upper disc for 8317; Diaphragm: Neoprene for 8317; Core Tube: 305 S.S.; Core and Plugnut: 430F S.S.; Core Springs: 302 S.S. and 17-7PH S.S.; Shading Coil: Copper (brass body); Silver (stainless steel body); Pilot Seat Cartridge/Disc Holder: Acetal for 8321; Piston: 303 S.S. for 8321

Electrical: Standard Voltage: 120 VAC, 60 Hz; Other voltages available: 24, 240, 480 VAC, 60 Hz (or 110, 220 VAC, 50 Hz); 6, 12, 24, 120, 240 VDC.

Solenoid Enclosures: These valves have Red-Hat II molded epoxy solenoids and are identified by the letter G in their catalog numbers, e.g., 8317G7.

Standard Enclosures: Red-Hat II: Types 1-4, 3S, and 4X Combination General Purpose and Watertight

Optional Enclosures: Red-Hat II: Types 3, 3S, 4, 4X, 6, 6P, 7 and 9 Combination Explosion-proof and Watertight. To order, add prefix EF to catalog number and call for price and availability.

Additional constructions are available. Call for optional open frame solenoids, junction box enclosures, and panel mount constructions.

Coil: Continuous duty molded Class F; Coils shown: 120VAC/60Hz.

Approvals: CSA certified. UL listed General Purpose Valves.

Kits: Include all internal parts that may require replacement in normal service: solenoid base subassembly, cores, resilient discs, seats, springs and all gaskets. Installation/maintenance sheets included. Replacement coils must be ordered separately.

Important for 8321 Series: A minimum operating pressure differential must be maintained between the pressure and exhaust ports. Supply and exhaust piping must be full area, unrestricted. ASCO flow controls and other similar components must be installed in the cylinder lines only.

Model Selection Guide

Brass Body – 120 volts AC / 60 Hz

(8317 Series Also Available in Stainless Steel. Please Call.)

Pipe Size (In.)	Orifice Size (In.)	Operating Pressure Differential (PSI)			Cv Flow Factor		Max. Fluid Temp. °F	Watt Rating/ Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
		Air/Inert Gas	Water	Lt. Oil 45SSU	Pressure	Exhaust			Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
Universal Operation – Pressure applied at ports 2 or 3														
1/4	3/32	5-80	5-50	5-50	0.20	0.73	180	10.1/F	8317G007	\$187.00	314462	\$145.00	238610-032-D	\$93.00
Normally Closed (Closed when de-energized)														
1/4	3/32	5-150	5-150	5-95	0.20	0.73	180	10.1/F	8317G035	187.00	314463	100.00	238610-032-D	93.00
1/4	9/32	10-200	10-200	10-200	0.80	1.2	180	6.1/F	8321G001	340.00	302925	180.00	238210-032-D	84.00
3/8	9/32	10-200	10-200	10-200	0.80	1.2	180	6.1/F	8321G002	340.00	302925	180.00	238210-032-D	84.00
Normally Closed (Closed when de-energized) – Air only, Exhaust to atmosphere														
1/4	3/32	5-150	—	—	0.20	0.73	—	10.1/F	8317G023	182.00	302902	93.00	238610-032-D	93.00
Normally Open (Open when de-energized)														
1/4	3/32	5-160	5-160	5-95	0.15	0.73	180	10.1/F	8317G053	187.00	314464	127.00	238610-032-D	93.00
3/4	9/32	10-200	10-200	10-200	0.80	1.2	180	6.1/F	8321G003	340.00	302927	217.00	238210-032-D	84.00
3/8	9/32	10-200	10-200	10-200	0.80	1.2	180	6.1/F	8321G004	340.00	302927	217.00	238210-032-D	84.00

If you place your order after 12 noon and need it next day, have it marked **RUSH** for priority shipment. Any emergency order placed after 3:30 p.m. must be shipped Federal Express.

Direct-Mount Inline Spool Valves 8551 Series

Features

- Compact spool valve convertible from 3/2 to 5/2
- NAMUR mount construction
- Standard manual operator
- DIN, Watertight and Explosion-proof solenoids available
- Single and dual solenoid constructions
- Mountable in any position
- Vents air from spring side to prevent actuator corrosion

Specifications

Construction: Body: Black anodized aluminum; Spring: Phosphate-treated black steel; Shading coil: Copper; Seals: NBR + PUR; Core/Core tube: Stainless Steel, Brass; End covers/Plate: 6/6 glass-filled PA/FV; Spool: Aluminum; Internal parts: Zamak, Steel, CA

Solenoid Enclosures: Standard (SC): IP65 type DIN (open frame) per 46244; Combination General Purpose and Watertight (WT): Types 1, 2, 3, 3S, 4, and 4X; Combination Explosion-proof and Watertight (EF): Types 3, 3S, 4, 4X, 6, 5P, 7, 9; Class I, Div. 1 (Groups A - D) and Class II, Div. 1 Type 9 (Groups E-G)

Standard Voltages: SC: 24, 120, 240 VAC, 50-60 Hz; 12, 24, 120 VDC. WT and EF: 24/50-60HZ, (120/60, 110-120/50), (240/60, 220-240/50) VAC; 6, 12, 24, 120 VDC.



Nominal Ambient Temperature: SC: AC/DC: 5° to 140°F (-15° to 60°C); WT/EF: AC: 5° to 140°F (-15° to 60°C) DC: 5° to 77°F (-15° to 25°C); **Note:** For temperatures below 32°F (0°C) moisture-free air must be used.

Approvals: SC: (2.5W and 3W only) UL recognized component, CSA certified. WT: UL recognized component, CSA certified. EF: UL and CSA solenoid approval. Meets applicable CE directives.

Model Selection Guide

Anodized aluminum body, NAMUR mount – 120 volts AC / 60 Hz

Pipe Size	Orifice Size	Cv Flow Factor	Operating Pressure Differential (PSI)		Watt Rating/ Class of Coil Insulation	Solenoid Enclosure Style	Solenoid Valve		Replacement Coil	
			Min.	Max.			Catalog Number	Price Each	Catalog Number	Price Each
Direct mount inline spool valve, single solenoid										
1/4"	1/4"	0.86	30	150	2.5	Open frame, DIN coil	SC8551A001MS	\$122.00	400127-088-*	\$43.00
1/4"	1/4"	0.86	30	150	6.3	Watertight	WT8551A001MS	166.00	266763-902-D	103.00
1/4"	1/4"	0.86	30	150	6.3	Explosion-proof and watertight	EF8551A001MS	185.00	266762-902-D	153.00





Pad-Mounted Pilot Valves 8380/8401 Series

Specifications

Solenoid Enclosures: Valves listed in this series have molded Ryton solenoids with a 1/2" male conduit connection.

Standard Enclosures: Those beginning with prefix WT are types 1-4, 3S, and 4X Combination General Purpose and Watertight.

Optional Enclosures: For types 3, 3S, 4, 4X, 6, 6P, 7, and 9 Combination Explosion-Proof and Watertight, order catalog numbers with prefix EF.

Electrical: Standard Voltage: 120 VAC, 60 Hz

(or 110, 220 VAC, 50 Hz). For other voltages, such as 24 or 240 VAC, 60 Hz, or 6, 12, 24, 120, 240 VDC

Nominal Ambient Temperature Ranges: AC Construction: 0° to 135° F; DC Construction: 0° to 104° F. **Note:** For temperatures below 32° F, moisture-free air must be used.

Coil: Watertight/Explosion-Proof solenoids constructed of Class H materials. DIN coils and open-frame leaded coils are continuous duty Class F.

Valve Parts in Contact with Fluids: Core Tube: 305 S.S.; Core and Plugnut: 430F S.S.; Spring: 302 S.S.; Seals: Low friction, low wear Buna-N; Interface Plate: Molded Zytel Nylon; **3-Way Valves Only** Main Body: Molded Zytel Nylon; **4-Way Valves Only:** Pressure Port: 303 S.S.; Main and Pilot Bodies, Metering End Caps: Molded Zytel Nylon; Spool and Slide: Molded Delrin; Flow Plate: Ceramic (alumina)

Standard Features: 4-Way Valves Only Built-in linear flow device controls Cv from 0.10 to 0.50. 3-way/4-way selector gasket to provide Breather Block capability (protection from corrosive air).

Approvals: WT is a UL recognized component general purpose valve, CSA certified. EF is a UL listed solenoid, CSA certified. U and SC options are UL recognized components, CSA certified.



Special Service Valves

IS Series Intrinsically Safe Solenoid Valves

Specifications

Media: Clean dry air or inert gas (filtered to 50µm or better, dewpoint 18° below min. exposure temperature)

Enclosure: Red Hat Type 4; Standard: Type 4 Watertight Splice Box; Optional: 316 SS. Type 4 Watertight Splice Box. (Specify prefix WS.)

Valve Parts in Contact with Fluid: Body: Brass or Stainless Steel; Seals and Discs: Buna-N or Neoprene; Core Tube: 304L SS; Core and Plugnut: 430F SS; Core Springs: 302 SS; Rider Rings: Teflon; Spring Retainer: Celcon; Pilot Seat Cartridge: (Series 8316 and 8344 only) Acetal

Temperature: Nominal Ambient Range: -4° to 140°F; Series 8314 Only: -40° to 140°F; Nominal Rise: 4°F (@ 24VDC, 300Ω); Fluid/Ambient Temperature: 140°F max.

Voltage: Standard: 24V, DC only; Operating: 24VDC ±10%

Current: Operating: 0.028 amps min., (V-2.4)/(R_B+R_L+150) max.; Charging: (V-1.8)/(R_B+R_L+52) max.; where V=supply voltage, R_B=barrier or current limiting resistance, and R_L=line resistance (wiring); Allowable Leakage: 1 mA max.; Drop to Reset Electronic Coil: 2 mA minimum.



Operating Parameters (@86°F)	21.5V	24.0V	26.5V
Maximum Series Resistance	510Ω	610Ω	690Ω
Maximum Holding Current, with 300Ω Barrier	43	48	54
Nominal Coil Watts, with 300Ω Barrier	0.38	0.46	0.57

Important: Minimum series resistance of 200Ω required in wiring circuit if a safety barrier is not used.

Coil: Continuous duty molded Class A.

Capacitor Charge Time: 1 second maximum.

Time Between Cycles: 1 second minimum.

Recommended Wire (#18) Length: 1.5 miles maximum.

Approvals: FM approved under J.I.3W8A8.AX (3610), [NFPA 493]; FM Nonincendive for Class I, Div. 2. CSA certified (LR-13976-116C).

Entity Parameters: Groups A-D: V max.: 30 VDC; I max.: 100 mA; Capacitance/Inductance: 0; **Groups C-D:** V max.: 34 VDC; I max.: 125 mA; Capacitance/Inductance: 0.



Model Selection Guide

Body Material	Size (In.)		Op. Pressure Differential	Cv Flow Factor (a)	Catalog Number	Price
	Pipe	Orifice				
3-Way Intrinsically Safe Single Solenoid Valve — Universal Operation (Pressure at any port), with Buna-N Disc						
Brass	1/4	1/16	0-150 PSI	0.08	JPIS8314B300	\$487.00
Stainless	1/4	1/16	0-150 PSI	0.08	JPIS8314B301	\$523.00
3-Way Intrinsically Safe Single Solenoid Valve — Universal (N/O or N/C), "Quick Exhaust" with Neoprene Diaphragm and Buna-N Disc						
Brass	1/4	**	10-150 PSI	3	JPIS8317B307*	\$35.00
Stainless	1/4	**	10-150 PSI	3	JPIS8317B308*	\$67.00
3-Way Intrinsically Safe Single Solenoid Valve — Normally Closed (Closed when de-energized), with Buna-N Diaphragm						
Brass	1/4	5/16	0-150 PSI	1.5	JPIS8316B301	\$88.00
Brass	3/8	5/16	0-150 PSI	1.8	JPIS8316B302	\$88.00
Brass	1/2	5/8	10-150 PSI	4	JPIS8316B304	\$95.00
4-Way Intrinsically Safe Single Solenoid Valve — Brass Body with Buna-N Disc						
Brass	1/4	1/4	10-150 PSI	0.80 (1)	JPIS8344B370*	\$965.00
Brass	3/8	3/8	10-150 PSI	1.4 (2.2)	JPIS8344B372*	\$1130.00
Brass	1/2	3/8	10-150 PSI	1.4 (2.2)	JPIS8344B374*	\$998.00

a Pressure to Cylinder (Cylinder to Exhaust)

* There are two exhaust flows in the exhaust mode (pilot and main).

** For Quick Exhaust valves, pressure port is 1/16" and exhaust port is 1/4". Pilot exhaust must be connected to the main exhaust when the air or inert gas cannot be exhausted to atmosphere.

Model Selection Guide

Pipe Size (In.)	Orifice Size (In.)	Main Line Supply Pressure (Air/Inert Gas)	Cv Flow Factor	Catalog Number	Price Each
For Worcester 390 Actuators: Standard Solenoid, Combination General Purpose and Watertight, 3- and 4-Way Single Solenoid					
1/4	1/4	20-150 PSIG	0.50	WT8401B200M	\$563.00
For Keystone and Nelles-Jamesbury* Actuators: Standard Solenoid, Combination General Purpose and Watertight, 3-Way Normally Closed					
1/4	3/64	0-150 PSIG	0.05	WT8380B202	Call
For Keystone and Nelles-Jamesbury* Actuators: Standard 3- and 4-Way Single Solenoid, Combination General Purpose and Watertight					
1/4	1/4	20-150 PSIG	0.50	WT8401B202M	\$516.00
For Keystone and Nelles-Jamesbury* Actuators: Explosion-Proof Solenoid, 3- and 4-Way Single Solenoid					
1/4	1/4	20-150 PSIG	0.50	EF8401B202M	\$534.00

* Kit 266666-001 (\$11.00 each) required for use with Nelles-Jamesbury SP and SP-SR actuators

Also available For Bettis and Watts Actuators

Rotary and Smart Actuator Motors

Instrument Valves

Process Control Accessories

Pressure and Temperature Switches

ASCO Solenoid Valves

Pressure Gauges

General Service 4-Way Solenoid Valves 8342 and 8344 Series

Specifications

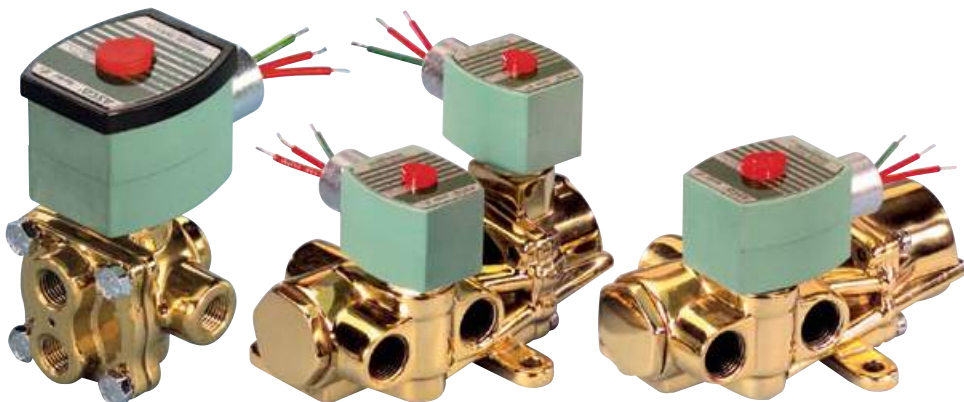
Series 8342 Valve Parts in Contact with Fluids:

Body: Brass or 304 S.S.; Seals and Discs: Buna-N, Viton*; Core Tube: 305 S.S.; Core/Plugnut: 430F S.S.; Springs: 302 S.S.; Shading Coil: Copper (brass body); Silver (stainless steel body); Sleeve: Nylon; Seats: Rulon**

Series 8344 Valve Parts in Contact with Fluids:

Body: Brass; Seals and Discs: Buna-N; Core Tube: 305 S.S.; Core and Plugnut: 430F S.S.; Springs: 302 S.S. and 17-7PH S.S.; Shading Coil: Copper; Pilot Seat Cartridge/Disc Holder: Acetal; Shift Gasket: Lead/Copper

Electrical: Standard Voltage: 120 VAC, 60 Hz; Other voltages: 24, 240, 480 VAC, 60 Hz (or 110, 220 VAC, 50 Hz); 6, 12, 24, 120, 240 VDC.



Solenoid Enclosures: 8342 Series valves have Red-Hat metal solenoid enclosures. Series 8344 valves have Red-Hat II molded epoxy solenoids and are identified by the letter G in their catalog numbers, e.g., 8344G70.

Standard Enclosures: Red-Hat: Type 1 General Purpose; Red-Hat II: Types 1-4, 3S, and 4X Combination General Purpose and Watertight.

Optional Enclosures: Red-Hat: Types 3, 7 and 9 combination Explosion-proof and Watertight. Red-Hat II: Types 3, 3S, 4, 4X, 6, 6P, 7 and 9 Combination Explosion-proof and Watertight. To order, add prefix EF to catalog number.

Additional constructions are available. Call for optional open frame solenoids, junction box enclosures, panel mount constructions.

Dual Solenoid Operation: 8342: Solenoid may be energized momentarily (1/10 second) or energized continuously. 8344: Minimum coil on-time for dual solenoid valves is 0.3 second on air service and 1.0 second on liquids. **Caution:** Do not energize both solenoids simultaneously.

Coil: Continuous duty molded Class F. Coils shown: 120VAC/60Hz

Optional: Adjustable flow controls regulate speed of the cylinder pistons in either direction. Flow adjustment of both Cylinder A and B ports is independently controlled.

Nominal Ambient Temperature Ranges: AC Construction: 32° to 125° F; DC Construction: 32° to 104° F.

Approvals: 8342: CSA certified. UL listed General Purpose Valve. 8344: CSA certified.



Kits: Include all internal parts that may require replacement in normal service: solenoid base subassembly, cores, resilient discs, seats, springs and all gaskets. Installation/maintenance sheets included. Replacement coils must be ordered separately.

Series 8344 Warning: A minimum operating pressure differential must be maintained between the pressure and exhaust ports. Supply and exhaust piping must be full area, unrestricted. ASCO flow controls and other similar components must be installed in the cylinder lines only.

Model Selection Guide

Pipe Size (In.)	Orifice Size (In.)	Maximum Operating Pressure (PSI)			Cv Flow Factor	Max. Fluid Temp. °F	Watt Rating/Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
		Air/Inert Gas	Water	Light Oil 300SSU				Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
8342 Series: Single Solenoid Construction – Energize coil to change state; Brass body 120VAC/60Hz													
1/4	3/16	125	100	100	0.70	160	20/F	8342G001	\$290.00	306191	\$218.00	272610-132-D	\$121.00
3/8	3/16	125	200	100	0.70	160	20/F	8342G003	298.00	306191	218.00	272610-132-D	121.00
8342 Series: Dual Solenoid Construction – Pulse one coil or the other to change state; Brass body 120VAC/60Hz													
1/4	3/16	125	125	125	0.70	160	15.4/F	8342G020	476.00	306193	305.00	099257-001-D	122.00
3/8	3/16	125	125	125	0.70	160	15.4/F	8342G022	585.00	306193	305.00	099257-001-D	122.00

Model Selection Guide

Pipe Size (In.)	Orifice Size (In.)	Operating Pressure Differential (PSI)			Cv Flow Factor		Max. Fluid Temp. °F	Watt Rating/Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
		Air/Inert Gas	Water	Light Oil 300SSU	Pressure	Exhaust			Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
8344 Series: Single Solenoid Construction; Brass body 120VAC/60Hz														
1/4	1/4	10-150	10-125	25-125	0.80	1.0	180	10.1/F	8344G070	\$532.00	302709	\$264.00	238610-032-D	\$93.00
1/4	1/4	10-250 1	10-250 1	25-250 1	0.80	1.0	180	17.1/F	8344G000	555.00	302710	307.00	238610-132-D	115.00
3/8	3/8	10-150	10-125	25-125	1.4	2.2	180	10.1/F	8344G072	669.00	302711	246.00	238610-032-D	93.00
3/8	1/4	10-250 1	10-250 1	25-250 1	0.80	1.0	180	17.1/F	8344G001	555.00	302710	307.00	238610-132-D	115.00
1/2	3/8	10-150	10-125	25-125	1.4	2.2	180	10.1/F	8344G074	669.00	302711	246.00	238610-032-D	93.00
1/2	3/8	10-250	10-250	25-250	1.4	2.2	180	17.1/F	8344G027	735.00	302712	384.00	238610-132-D	115.00
3/4	3/4	10-150	10-125	25-125	5.2	5.6	180	10.1/F	8344G076	1628.00	302713	297.00	238610-032-D	93.00

1 For best results, do not use valve rated 250 PSI on pressures less than 125 PSI.

8345 Series General Service 4-Way 2-Position Solenoid Valves

Specifications

Solenoid Enclosures: Valves in this series have Red-Hat II molded epoxy solenoids, identified by the letter G in their catalog numbers, e.g., 8345G1.

Standard Enclosures: *Red-Hat II:* Types 1–4, 3S, and 4X Combination General Purpose and Watertight

Optional Enclosures: *Red-Hat II:* Types 3, 3S, 4, 4X, 6, 6P, 7 and 9 Combination Explosion-proof and Watertight..

Additional constructions are available. Call for optional open frame solenoids, junction box enclosures, and panel mount constructions.

Nominal Ambient Temperature Ranges: *AC Construction:* 32° to 125°F; *DC Construction:* 32° to 104°F.

Valve Parts in Contact with Fluids: *Body:* Brass; *Seals and Discs:* Buna-N and Nylon; *Core Tube:* 305 S.S.; *Core and Plugnut:* 430F S.S.; *Springs:* 302 S.S.; *Shading Coil:* Copper; *Piston:* Nylon

Leakage: *Liquids:* none; *Air:* slight leakage through exhaust when energized.

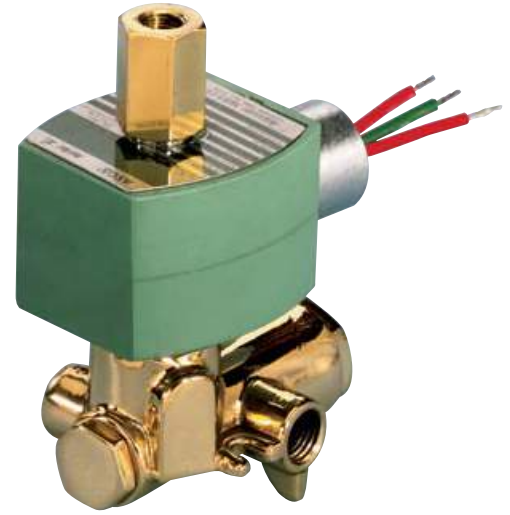
Electrical: *Standard Voltage:* 120 VAC, 60 Hz; *Other voltages available:* 24, 240, 480 VAC, 60 Hz, (or 110, 220 VAC, 50 Hz); 6, 12, 24, 120, 240 VDC.

Coil: Continuous duty molded Class F. Coils shown: 120VAC/60Hz

Approvals: CSA certified. UL listed General Purpose Valves.

Kits: Include all internal parts that may require replacement in normal service: solenoid base subassembly, cores, resilient discs, seats, springs and all gaskets. Installation/maintenance sheets are included to simplify installation. Replacement coils must be ordered separately.

Important: A minimum operating pressure differential must be maintained between the pressure and exhaust ports. Supply and exhaust piping must be full area, unrestricted. ASCO flow controls and other similar components must be installed in the cylinder lines only.



Model Selection Guide

Brass Body – 120 volts AC / 60 Hz

(Also Available in Stainless Steel. Please Call.)

Pipe Size (In.)	Orifice Size (In.)	Min. Press. Req'd.	Operating Pressure Differential (PSI)			Inlet/Exhaust Cv Flow Factor	Max. Fluid Temp. °F	Watt Rating/Class of Coil Insulation	Solenoid Valve		Repair Kit		Replacement Coil	
			Maximum						Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
			Air/Inert Gas	Water	Light Oil 300SSU									
Single Solenoid — Energize coil to change state														
1/4	1/16	10	150	150	150	0.09	180	10.1/F	8345G001	\$244.00	314453	\$128.00	238610-032-D	\$93.00
Single Solenoid — Air only construction, Exhaust to atmosphere, Energize coil to change state														
1/4	1/16	10	150	—	—	0.09	180	10.1/F	8345H003	265.00	302698	134.00	238610-032-D	93.00

Solenoid Valve Accessories

ASCO®

Adjustable Flow Control Valves

ASCO's patented adjustable flow control design has greater flow capacity than most conventional constructions where a separate adjustment speed control and ball check for free flow are utilized.

A spring-loaded disc allows free flow in one direction and an adjustable or controlled flow in the opposite direction. Flow adjustment is performed by a tapered brass stem that controls the flow through the cross hole in the disc.

The adjustable knob contains a locking device with a plastic metering knob and a thumb latch pawl. The valve bonnet is scribed with graduations that serve as a position indicator for the stem.

Specifications

Valve Parts in Contact with Fluids: Body and Stem: Brass; Seals: Buna-N; Disc: Acetal; Spring: 302 S.S.; Retainer: 17-7PH SS

Nominal Ambient Temperature: 125°F Maximum

Important: Valves may be mounted in any position.

Model Selection Guide

Pipe Size	Orifice Size	Cv Flow Factor		Operating Pressure (PSI)	Operating Pressure Differential	Max. Fluid Temp.	Catalog Number	Price Each
		Meter	Free					
1/4"	3/8"	0.22	1.2	1 PSI	300 PSI Max.	180° F	V022A001	\$138.00
3/8"	3/8"	0.90	1.4	1 PSI	300 PSI Max.	180° F	V022 002	145.00
1/2"	7/16"	1.2	2.6	1 PSI	300 PSI Max.	180° F	V022 003	164.00
3/4"	17/32"	1.6	4.0	2.5 PSI	300 PSI Max.	180° F	V022 004	250.00



2-Way Strainers

ASCO's rugged self-cleaning "Y" type body strainers have an easily removable strainer element of perforated stainless steel sheet. They are suitable for air, water, oil and steam.

Strainers should be used wherever it is essential that the fluid flowing through pipe lines be maintained free of foreign solid matter. This is necessary to assure proper flow and to prevent damage to controls and other equipment.

ASCO strainers are made of a forged brass body with stainless steel strainer element and Teflon or Viton seals.

The strainers can be mounted in any position. When installed with solenoid valves, the strainer should be connected in the upstream (inlet) side of the valve — as close to the valve as possible.

Model Selection Guide

Pipe Size	Cv Flow Factor	Screen Mesh Size	Particle Retention Size		Max. Fluid Temp.	Safe Working Pressure	Catalog Number	Price Each
			Microns	Inches				
1/4"	1.7	60 x 60	155	0.0061	400° F	750 PSI	8600A002	\$55.00
3/8"	1.9	100 x 100	155	0.0061	400° F	750 PSI	8600A013	131.00
1/2"	2.6	100 x 100	155	0.0061	400° F	750 PSI	8600A014	141.00
3/4"	4.7	100 x 100	155	0.0061	400° F	750 PSI	8600A015	270.00



Exhaust Mufflers

Use the muffler to silence exhaust from compressed air devices. The muffler-speed control combination will reduce noise and control the speed of cylinders, and can be used on dry or lubricated air up to 150 PSI and up to 200°F. Made of sintered bronze.

Model Selection Guide

	Conn. (NPT)	Length	Hex	Catalog Number	Price
Air Muffler	1/8"	1.29"	0.4375"	264645-001	\$6.00
	1/4"	1.41"	0.5625"	264645-002	8.00
Air Muffler and Speed Control	1/8"	1.29"	0.4375"	276790-001	18.00
	1/4"	1.41"	0.5625"	276790-002	20.00



Adjustable Electronic Timer

Solid state electronic timer can be used to automatically control ASCO solenoid valves for automatic draining of condensate in compressed air systems. LED lights indicate timing phase.

Specifications

Duty Cycle: 100%

Accuracy: Repeat: ±0.1%; Scale: ±10%

Adjustable Timing: On: From 2–40 seconds; Off: From 30 seconds to 45 minutes

Operating Temperature: 114° to 122° F

Reset/Test: Manual override touch switch



Supply Voltage: 24-240V, AC/DC, 50/60 Hz

Capacity: Switch: 1 Amp; Inrush: 10 Amps for 10 mSec

Current Consumption: 4 mA max

Environmental Protection: NEMA 4

Connection: DIN 43650, ISO-4400/6952

Model Selection Guide

Description	Catalog No.	Price
Adjustable Electronic Timer	272839-001	\$126.00
Power Cord Kit	272852	17.00
DIN Connector Kit	272873	3.00



Timer and valve can be assembled in the field. Red-Hat II valve with DIN connection coil must be used. Be sure to select a valve with a current draw not exceeding 1 Amp max. switch capacity.