

### Features

- Designed for high flow and high pressure service
- Direct acting, requires no minimum operating pressure
- Choice of metal seating materials to handle aggressive fluids, or resilient seating for airtight shutoff
- Ideal for power plants and similar applications

### Construction

Valve Parts in Contact with Fluids		
Body	Brass	304 Stainless Steel
Disc	303 Stainless Steel (Metal), PA, or Brass (Resilient)	
Seats	NBR, Phosphor Bronze	303 Stainless Steel
Core Tube	305 Stainless Steel	
Core and Plugnut	430F Stainless Steel	
Springs	302 Stainless Steel, 17-7PH, or Inconel	
Shading Coil	Copper	Silver
Gaskets	NBR	PTFE

### Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption				Spare Coil Part Number			
	DC Watts	AC			General Purpose		Explosionproof	
		Watts	VA Holding	VA Inrush	AC	DC	AC	DC
F	-	20.1	43	240	272610	-	272614	-
H	36.2	28	60	330	222345	222184	222345	222184
H	-	16.1	35	180	272810	-	272814	-
H	-	28.2	50	385	224195	-	224195	-

**Standard Voltages:** 24, 120, 240, 480 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz).  
6, 12, 24, 120, 240 volts DC. Must be specified when ordering.  
(Note: 24 volt AC, 60 Hz not available with 28.2 watt coil)

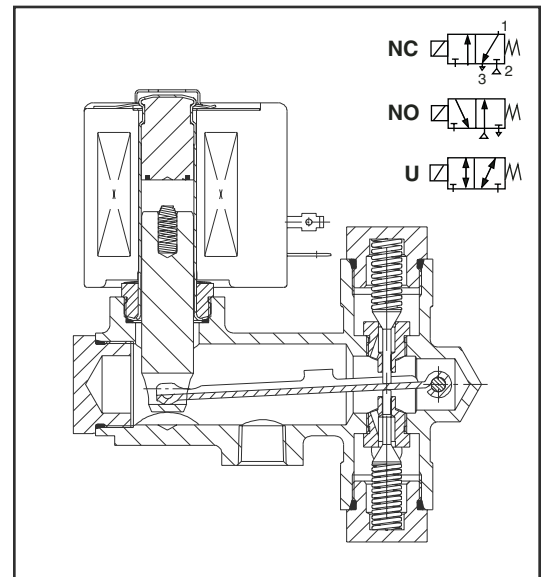
**Note:** 125 and 250 volts DC are battery voltages applied in power plants. Special AC and DC constructions are available to pilot power plant control valves. Consult your local ASCO sales office for details.

### Solenoid Enclosures

**Standard:** RedHat II - Watertight, Types 1, 2, 3, 3S, 4, and 4X; RedHat - Type 1.

**Optional:** RedHat II - Explosionproof and Watertight, Types 3, 3S, 4, 4X, 6, 6P, 7, and 9; RedHat - Explosionproof and Watertight, Types 3, 4, 4X, 7, and 9. See footnote on next page. (To order, add prefix "EF" to catalog number.)

See *Optional Features Section* for other available options.



### Nominal Ambient Temp. Ranges:

Class F Coils AC: 32°F to 125°F (0°C to 52°C)

Class H Coils AC: 32°F to 140°F (0°C to 59°C)

Class H Coils DC: 32°F to 77°F (0°C to 25°C)

(104°F/40°C occasionally)

Refer to *Engineering Section* for details.

### Approvals

CSA certified (8300 Series only).

Meets applicable CE directives.

Refer to *Engineering Section* for details.

**Specifications (English units)**

Pipe Size (in)	Orifice Size (in)	Cv Flow Factor	Operating Pressure Differential (psi)				Max. Fluid Temp. °F		Brass Body		Stainless Steel Body		Watt Rating/ Class of Coil Insulation	
			Air-Inert Gas, Water, Lt. Oil ④						Add Suffix "F" for NC, "G" for NO, "U" for Univ. ①					
			Max. AC		Max. DC		AC	DC	Catalog Number	Const. Ref.	Catalog Number	Const. Ref.	AC	DC
			NC/NO	Univ.	NC/NO	Univ.								
<b>METAL SEATS AND DISCS</b>														
1/8	1/8	.13	-	-	250	125	-	180	8300D055	1	-	-	-	36.2/H
1/8	1/8	.13	550	300	-	-	200	-	8300G055	1	-	-	20.1/F	-
1/8	3/16	.35	-	-	125	60	-	180	8300D003	1	-	-	-	36.2/H
1/8	3/16	.35	250	150	-	-	200	-	8300G003	1	-	-	20.1/F	-
1/4	3/16	.35	-	-	125	60	-	180	8300D058	1	-	-	-	36.2/H
1/4	3/16	.35	250	150	-	-	200	-	8300G058	1	-	-	20.1/F	-
1/4	1/4	.45	-	-	75	35	-	180	8300A081	1	-	-	-	36.2/H
1/4	1/4	.45	190	90	-	-	200	-	8300G081	1	-	-	20.1/F	-
1/4	1/4	.45	250	120	-	-	200	-	8300D061 ②	1	-	-	28/H	-
3/8	1/4	.45	-	-	50	25	-	180	-	-	8300B410	2	-	36.2/H
3/8	1/4	.45	150	75	-	-	200	-	-	-	8300G410	2	20.1/F	-
3/8	1/4	.45	-	-	75	35	-	180	8300A082	1	-	-	-	36.2/H
3/8	1/4	.45	190	90	-	-	200	-	8300G082	1	-	-	20.1/F	-
3/8	1/4	.45	250	120	-	-	200	-	8300D009 ②	1	-	-	28/H	-
3/8	1/4	.45	175	85	-	-	200	-	-	-	8300B411 ②	2	28/H	-
3/8	5/16	.75	-	-	40	20	-	180	8300D064	2	8300B412	2	-	36.2/H
3/8	5/16	.75	120	60	-	-	200	-	8300G064	2	8300G412	2	20.1/F	-
3/8	3/8	1.00	-	-	30	15	-	180	8300D072	2	8300B413	2	-	36.2/H
3/8	3/8	1.00	75	35	-	-	200	-	8300G072	2	8300G413	2	20.1/F	-
1/2	5/16	.75	-	-	40	20	-	180	8300D068	2	8300B403	3	-	36.2/H
1/2	5/16	.75	120	60	-	-	200	-	8300G068	2	8300G403	3	20.1/F	-
1/2	3/8	1.00	-	-	30	15	-	180	8300D076	2	8300B404	3	-	36.2/H
1/2	3/8	1.00	75	35	-	-	200	-	8300G076	2	8300G404	3	20.1/F	-
<b>NBR SEATS AND BRASS DISCS</b>														
1/4	3/16	.25	-	-	125	60	-	180	8300D058R	1	-	-	-	36.2/H
1/4	3/16	.25	250	150	-	-	180	-	8300G058R	1	-	-	20.1/F	-
1/4	1/4	.39	-	-	75	35	-	180	8300A081R	1	-	-	-	36.2/H
1/4	1/4	.39	150	75	-	-	180	-	8300G081R	1	-	-	20.1/F	-
3/8	1/4	.39	-	-	75	35	-	180	8300A082R	1	-	-	-	36.2/H
3/8	1/4	.39	150	75	-	-	180	-	8300G082R	1	-	-	20.1/F	-
3/8	5/16	.53	-	-	40	20	-	180	8300D064R	2	-	-	-	36.2/H
3/8	5/16	.53	120	60	-	-	180	-	8300G064R	2	-	-	20.1/F	-
1/2	5/16	.53	-	-	40	20	-	180	8300D068R	2	-	-	-	36.2/H
1/2	5/16	.53	120	60	-	-	180	-	8300G068R	2	-	-	20.1/F	-
<b>PHOSPHOR BRONZE SEATS - STEAM SERVICE ONLY</b>														
1/4	1/4	.45	100	50	-	-	344	-	8315G002	1	-	-	16.1/H	-
3/8	1/4	.45	100	50	-	-	344	-	8315G003	1	-	-	16.1/H	-
3/8	5/16	.75	105	50	-	-	344	-	8315 034 ③	4	-	-	28.2/H	-
1/2	5/16	.75	105	50	-	-	344	-	8315 035 ③	4	-	-	28.2/H	-

① NC = Normally Closed; Exhaust pressure when de-energized. NO = Normally Open; Applies pressure when de-energized. Univ. = Universal; Pressure at any port.  
 ② "EF" Prefix variations are suitable for enclosures Types 3, 4, 7 (C&D), and 9 (E) only and have a temperature range code T3A. Refer to Engineering Section for details.  
 ③ Not available with 24 volt, 60 Hz coil. ④ Water rating, CSA certified up to 232 psi.

## Specifications (Metric units)

Pipe Size (in)	Orifice Size (mm)	Kv Flow Factor (m <sup>3</sup> /h)	Operating Pressure Differential (bar)				Max. Fluid Temp. °C		Brass Body		Stainless Steel Body		Watt Rating/ Class of Coil Insulation	
			Air-Inert Gas, Water, Lt. Oil ④						Add Suffix "F" for NC, "G" for NO, "U" for Univ. ①					
			Max. AC		Max. DC									
			NC/NO	Univ.	NC/NO	Univ.	AC	DC	Catalog Number	Const. Ref.	Catalog Number	Const. Ref.	AC	DC
<b>METAL SEATS AND DISCS</b>														
1/8	3	.11	-	-	17	9	-	82	8300D055	1	-	-	-	36.2/H
1/8	3	.11	38	21	-	-	93	-	8300G055	1	-	-	20.1/F	-
1/8	5	.30	-	-	9	4	-	82	8300D003	1	-	-	-	36.2/H
1/8	5	.30	17	10	-	-	93	-	8300G003	1	-	-	20.1/F	-
1/4	5	.30	-	-	9	4	-	82	8300D058	1	-	-	-	36.2/H
1/4	5	.30	17	10	-	-	93	-	8300G058	1	-	-	20.1/F	-
1/4	6	.39	-	-	5	2	-	82	8300A081	1	-	-	-	36.2/H
1/4	6	.39	13	6	-	-	93	-	8300G081	1	-	-	20.1/F	-
1/4	6	.39	17	8	-	-	93	-	8300D061 ②	1	-	-	28/H	-
3/8	6	.39	-	-	3	2	-	82	-	-	8300B410	2	-	36.2/H
3/8	6	.39	10	5	-	-	93	-	-	-	8300G410	2	20.1/F	-
3/8	6	.39	-	-	5	2	-	82	8300A082	1	-	-	-	36.2/H
3/8	6	.39	13	6	-	-	93	-	8300G082	1	-	-	20.1/F	-
3/8	6	.39	17	8	-	-	93	-	8300D009 ②	1	-	-	28/H	-
3/8	6	.39	12	6	-	-	93	-	-	-	8300B411 ②	2	28/H	-
3/8	8	.64	-	-	3	1	-	82	8300D064	2	8300B412	2	-	36.2/H
3/8	8	.64	8	4	-	-	93	-	8300G064	2	8300G412	2	20.1/F	-
3/8	10	.86	-	-	2	1	-	82	8300D072	2	8300B413	2	-	36.2/H
3/8	10	.86	5	2	-	-	93	-	8300G072	2	8300G413	2	20.1/F	-
1/2	8	.64	-	-	3	1	-	82	8300D068	2	8300B403	3	-	36.2/H
1/2	8	.64	8	4	-	-	93	-	8300G068	2	8300G403	3	20.1/F	-
1/2	10	.86	-	-	2	1	-	82	8300D076	2	8300B404	3	-	36.2/H
1/2	10	.86	5	2	-	-	93	-	8300G076	2	8300G404	3	20.1/F	-
<b>NBR SEATS AND BRASS DISCS</b>														
1/4	5	.21	-	-	9	4	-	82	8300D058R	1	-	-	-	36.2/H
1/4	5	.21	17	10	-	-	82	-	8300G058R	1	-	-	20.1/F	-
1/4	6	.33	-	-	5	2	-	82	8300A081R	1	-	-	-	36.2/H
1/4	6	.33	10	5	-	-	82	-	8300G081R	1	-	-	20.1/F	-
3/8	6	.33	-	-	5	2	-	82	8300A082R	1	-	-	-	36.2/H
3/8	6	.33	10	5	-	-	82	-	8300G082R	1	-	-	20.1/F	-
3/8	8	.45	-	-	3	1	-	82	8300D064R	2	-	-	-	36.2/H
3/8	8	.45	8	4	-	-	82	-	8300G064R	2	-	-	20.1/F	-
1/2	8	.45	-	-	3	1	-	82	8300D068R	2	-	-	-	36.2/H
1/2	8	.45	8	4	-	-	82	-	8300G068R	2	-	-	20.1/F	-
<b>PHOSPHOR BRONZE SEATS - STEAM SERVICE ONLY</b>														
1/4	.5	.39	7	3	-	-	173	-	8315G002	1	-	-	16.1/H	-
3/8	.5	.39	7	3	-	-	173	-	8315G003	1	-	-	16.1/H	-
3/8	.6	.64	7	3	-	-	173	-	8315 034 ③	4	-	-	28.2/H	-
1/2	.6	.64	7	3	-	-	173	-	8315 035 ③	4	-	-	28.2/H	-

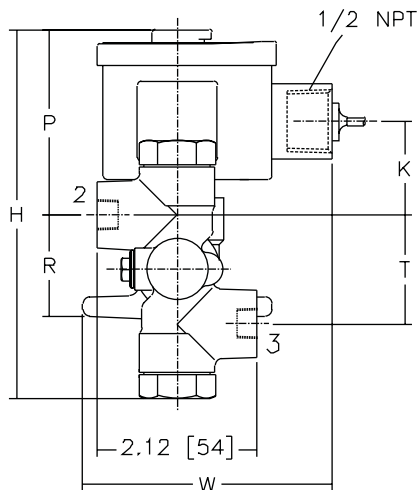
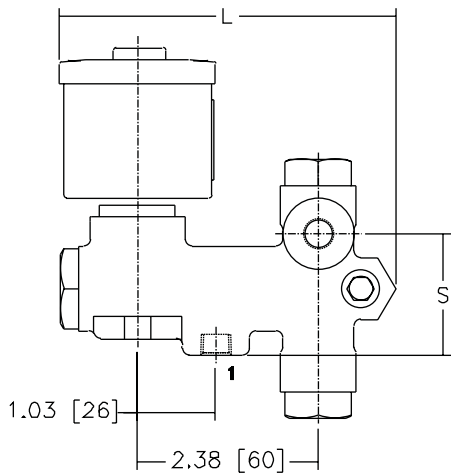
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 ③ Not available with 24 volt, 60 Hz coil. ④ Water rating, CSA certified up to 16 bar.

**Dimensions: inches (mm)**

Const. Ref.		H	K	L	P	R	S	W	T
1	in	4.89	1.44	4.44	2.46	1.34	1.60	3.30	1.44
	mm	124	37	113	62	34	40	84	37
2	in	5.91	1.88	4.44	2.37	1.66	2.00	3.30	1.88
	mm	150	48	113	60	42	51	84	48
3	in	5.90	1.88	4.62	2.37	1.66	2.00	3.55	1.88
	mm	150	48	117	60	42	51	90	48
4	in	4.89	1.44	4.44	2.46	1.34	1.60	3.30	1.44
	mm	124	37	113	62	34	40	84	37

**IMPORTANT:** Valves must be mounted vertical and upright.

**Const. Ref. 1, 2, 3, 4**



**Flow Diagrams**

