

## Features

- Flow rates adjustable between 0% and 100% of rating
- Flow rate can also be regulated by a range of electrical inputs (sensors, transmitters, PLC, etc.) via an ASCO Electronic Control Unit or similar circuit
- Suitable for use in air/gas, low vacuum service, as well as to precisely control flow of water

## Construction

Valve Parts in Contact with Fluids			
	8202		8203
<b>Body</b>	Brass	303 Stainless Steel	Brass
<b>Seals and Disc/Diaphragm*</b>	FKM		NBR
<b>Core Tube</b>	305 Stainless Steel		
<b>Core and Plugnut</b>	430F Stainless Steel		
<b>Springs</b>	302 Stainless Steel		
<b>Rider Rings</b>	PTFE		
<b>Breaker Piece</b>	Brass	303 Stainless Steel	Brass

## Electrical

**Standard voltage:** 24 VDC

**Coil:** Molded Class F

**Coil resistance:** 25 Ohm at 68°F (20°C)

**Operating current:** 100 - 500 mA

**Recommended PWM frequency:** 300 Hz Air/Gas; 200 Hz Water/Light Oil

**Hysteresis:** <5% (<7.5% for 8203 Valves) ①

**Repeatability:** <3% (<1% for 1/8" NPT Valves) ①

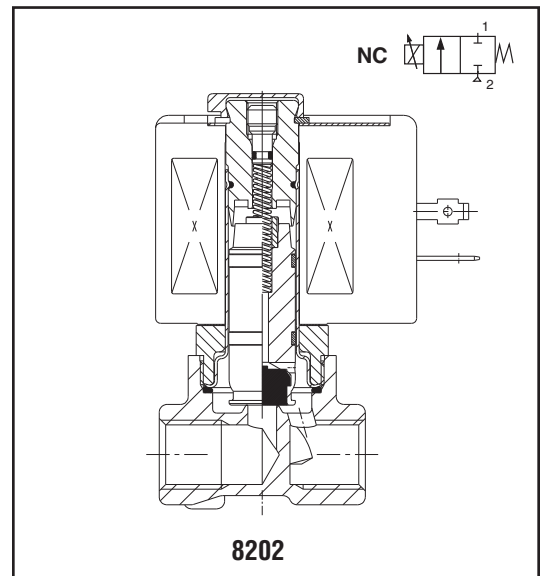
**Sensitivity:** <2% (<1% for 1/8" NPT Valves) ①

① Based on ASCO Electronic Control Unit at constant differential pressure.

## Solenoid Enclosures

**Standard:** RedHat II Class F coil with DIN connection (meets ISO 4400/DIN 43650A standards). For 22.6 watt solenoids.

**Optional:** For Class H coil, use prefix "SV" (for use with customer supplied electronics): General Purpose and Watertight, Types 1, 2, 3, 3S, and 4X on 22.6 watt solenoids.



## Nominal Ambient Temp. Ranges

14°F to 104°F (-10°C to 40°C) for 22.6 watt solenoid.

## Approvals (8202 1/4" to 3/8" only)

UL Recognized Component with DIN solenoid (prefix SD or SV).

UL Listed with threaded conduit (no prefix)

CSA certified.

**Note:** The Electronic Control Unit (sold separately) is only compatible with DIN connectors

SPECIAL SERVICE VALVES

**Specifications (English units)**

Pipe Size (in)	Orifice Size (in)	Cv Flow Factor	Operating Pressure Differential (psi)			Max. Fluid Temp. °F	Catalog Number		UL ② Listing	Const. Ref.	Watt Rating/ Class of Coil Insulation ③
			Min.	Max.			Air-Inert Gas	Water/Light Oil			
				Low Vacuum (Hg) ①	Air/Gas/ Water/Oil						
<b>Brass Body</b>											
1/4	3/64	.06	0	29	230	150	SD8202G001V	SD8202G0051V	●	1	22.6/F
1/4	3/32	.14	0	29	115	150	SD8202G002V	SD8202G0052V	●	1	22.6/F
1/4	1/8	.28	0	29	60	150	SD8202G003V	SD8202G0053V	●	1	22.6/F
1/4	5/32	.50	0	29	35	150	SD8202G004V	SD8202G0054V	●	1	22.6/F
1/4	7/32	.85	0	29	20	150	SD8202G006V	SD8202G0056V	●	1	22.6/F
1/4	9/32	1.1	0	29	15	150	SD8202G007V	SD8202G0057V	●	1	22.6/F
3/8	1/8	.28	0	29	60	150	SD8202G023V	SD8202G073V	●	2	22.6/F
3/8	5/32	.50	0	29	35	150	SD8202G024V	SD8202G074V	●	2	22.6/F
3/8	7/32	.85	0	29	20	150	SD8202G026V	SD8202G076V	●	2	22.6/F
3/8	9/32	1.1	0	29	15	150	SD8202G027V	SD8202G077V	●	2	22.6/F
<b>Stainless Steel Body</b>											
1/4	3/64	.06	0	29	230	150	SD8202G011V	SD8202G0061V	●	3	22.6/F
1/4	3/32	.14	0	29	115	150	SD8202G012V	SD8202G0062V	●	3	22.6/F
1/4	1/8	.28	0	29	60	150	SD8202G013V	SD8202G0063V	●	3	22.6/F
1/4	5/32	.50	0	29	35	150	SD8202G014V	SD8202G0064V	●	3	22.6/F
1/4	7/32	.85	0	29	20	150	SD8202G016V	SD8202G0066V	●	3	22.6/F
1/4	9/32	1.1	0	29	15	150	SD8202G017V	SD8202G0067V	●	3	22.6/F
3/8	1/8	.28	0	29	60	150	SD8202G033V	SD8202G0083V	●	4	22.6/F
3/8	5/32	.50	0	29	35	150	SD8202G034V	SD8202G0084V	●	4	22.6/F
3/8	7/32	.85	0	29	20	150	SD8202G036V	SD8202G0086V	●	4	22.6/F
3/8	9/32	1.1	0	29	15	150	SD8202G037V	SD8202G0087V	●	4	22.6/F

① Applicable to air-Inert gas valves only.  
 ② ● General Purpose valve. Refer to Engineering Section (Approvals) for more details.  
 ③ Will vary with duty cycle (8.5 watts at 500 mA with ambient temp. = 104°F (40°C)).

**SPECIAL SERVICE VALVES**

Pipe Size (in)	Orifice Size (in)	Cv Flow Factor	Operating Pressure Differential (psi)			Max. Fluid Temp. °F	Catalog Number		UL ② Listing	Const. Ref.	Watt Rating/ Class of Coil Insulation ③
			Min.	Max.			Water/Light Oil				
				Water/ Light Oil							
<b>Brass Body</b>											
3/8	1/2	2.4	5	150	150	SD8203G001	-	5	22.6/F		
1/2	1/2	2.4	5	150	150	SD8203G002	-	5	22.6/F		

## Specifications (Metric units)

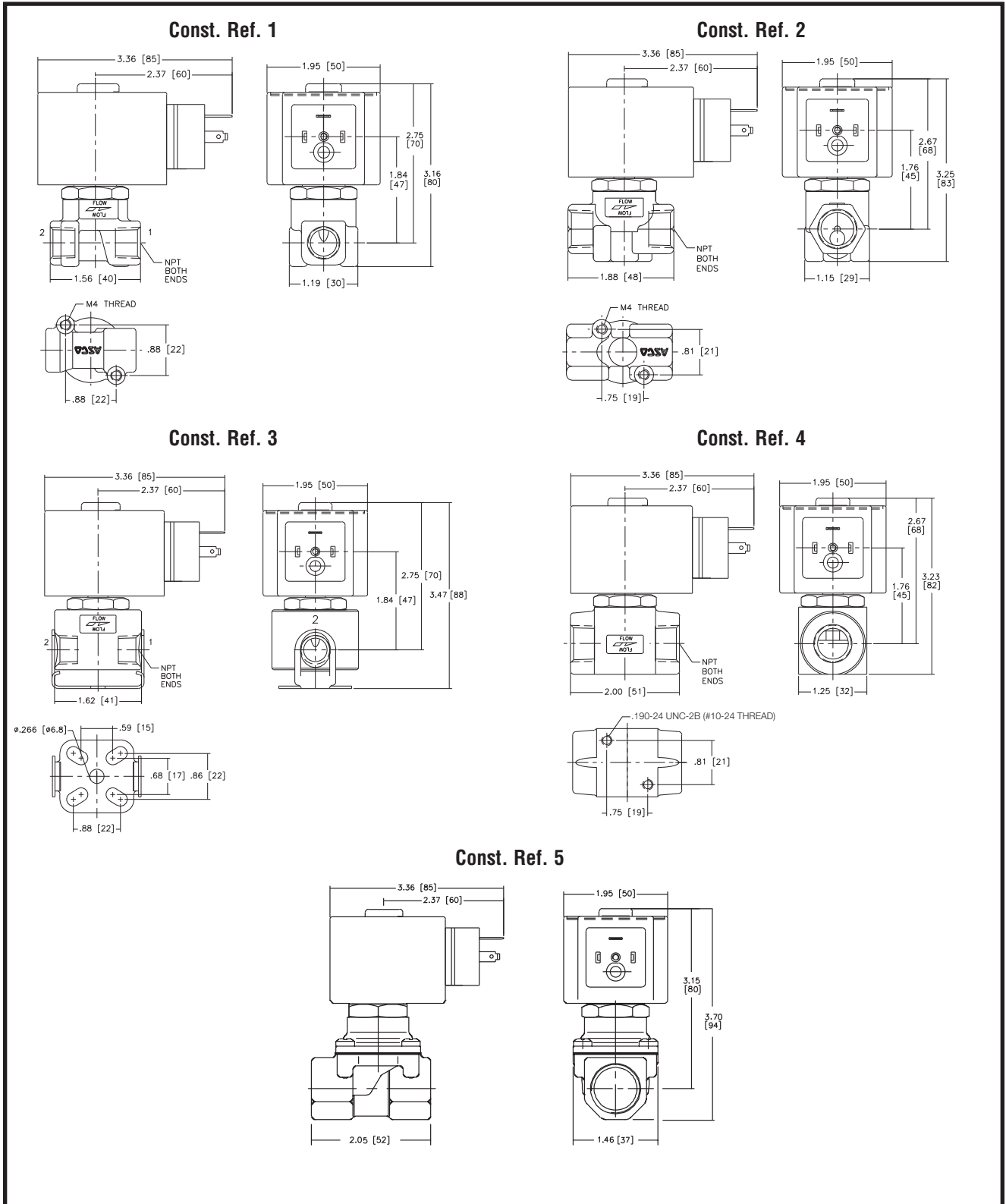
Pipe Size (in)	Orifice Size (mm)	Kv Flow Factor (m <sup>3</sup> /h)	Operating Pressure Differential (bar)			Max. Fluid Temp. °C	Catalog Number		UL ② Listing	Const. Ref.	Watt Rating/ Class of Coil Insulation ③
			Min.	Max.			Air-Inert Gas	Water/Light Oil			
				Low Vacuum (Hg) ①	Air/Gas/ Water/Oil						
<b>Brass Body</b>											
1/4	1.2	.05	0	2	16	65	SD8202G001V	SD8202G051V	●	1	22.6/F
1/4	2.4	.12	0	2	8	65	SD8202G002V	SD8202G052V	●	1	22.6/F
1/4	3.2	.24	0	2	4	65	SD8202G003V	SD8202G053V	●	1	22.6/F
1/4	4.0	.42	0	2	2	65	SD8202G004V	SD8202G054V	●	1	22.6/F
1/4	5.6	.72	0	2	1	65	SD8202G006V	SD8202G056V	●	1	22.6/F
1/4	7.1	.90	0	2	1	65	SD8202G007V	SD8202G057V	●	1	22.6/F
3/8	3.2	.24	0	2	4	65	SD8202G023V	SD8202G073V	●	2	22.6/F
3/8	4.0	.42	0	2	2	65	SD8202G024V	SD8202G074V	●	2	22.6/F
3/8	5.6	.72	0	2	1	65	SD8202G026V	SD8202G076V	●	2	22.6/F
3/8	7.1	.90	0	2	1	65	SD8202G027V	SD8202G077V	●	2	22.6/F
<b>Stainless Steel Body</b>											
1/4	1.2	.05	0	2	16	65	SD8202G011V	SD8202G061V	●	3	22.6/F
1/4	2.4	.12	0	2	8	65	SD8202G012V	SD8202G062V	●	3	22.6/F
1/4	3.2	.24	0	2	4	65	SD8202G013V	SD8202G063V	●	3	22.6/F
1/4	4.0	.42	0	2	2	65	SD8202G014V	SD8202G064V	●	3	22.6/F
1/4	5.6	.72	0	2	1	65	SD8202G016V	SD8202G066V	●	3	22.6/F
1/4	7.1	.90	0	2	1	65	SD8202G017V	SD8202G067V	●	3	22.6/F
3/8	3.2	.24	0	2	4	65	SD8202G033V	SD8202G083V	●	4	22.6/F
3/8	4.0	.42	0	2	2	65	SD8202G034V	SD8202G084V	●	4	22.6/F
3/8	5.6	.72	0	2	1	65	SD8202G036V	SD8202G086V	●	4	22.6/F
3/8	7.1	.90	0	2	1	65	SD8202G037V	SD8202G087V	●	4	22.6/F

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 ② ● General Purpose valve. Refer to Engineering Section (Approvals) for more details.  
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Pipe Size (in)	Orifice Size (mm)	Kv Flow Factor (m <sup>3</sup> /h)	Operating Pressure Differential (bar)		Max. Fluid Temp. °C	Catalog Number		UL ② Listing	Const. Ref.	Watt Rating/ Class of Coil Insulation ③
			Min.	Max.		Water/Light Oil	Water/Light Oil			
				Water/Light Oil						
<b>Brass Body</b>										
3/8	12.7	2.1	.3	10	65	SD8203G001	-	5	22.6/F	
1/2	12.7	2.1	.3	10	65	SD8203G002	-	5	22.6/F	

**SPECIAL SERVICE VALVES**

**Dimensions inches (mm)**



**SPECIAL SERVICE VALVES**