

### Features

- 3-way normally closed, normally open, or universal operation
- Compact design
- Brass and 316 stainless steel body constructions
- Mountable in any position
- NSF 61 Annex G and 169 version available for potable water and food service

### Construction

Valve Parts in Contact with Fluids			
	General Purpose		NSF
<b>Body</b>	<b>Brass</b>	<b>316 Stainless Steel</b>	<b>316 Stainless Steel</b>
<b>Core Tube/Bonnet</b>	S.S. / Plated Steel	S.S. / S.S.	S.S. / S.S.
<b>Core and Plugnut</b>	Stainless Steel		
<b>Springs</b>	Stainless Steel		
<b>Seals and Disc</b>	FKM		EPDM
<b>Shading Coil</b>	Copper		Copper

### Electrical

Prefix	Standard Coil and Class of Insulation	Watt Rating and Power Consumption				Ambient Temp. °F	Spare Coil Family	
		DC Watts	Watts	VA Holding	VA Inrush		AC	DC
U	F	6.9	6.3	8.8	12.1	15 to 140	400117	400117
SC	F	6.9	6.3	8.8	12.1	15 to 140	400127	400127

**Standard voltages:** 24,120, 240 volts AC, 50-60 Hz. 12, 24, 120 volts DC  
Must be specified when ordering.

### 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 (see kits below).

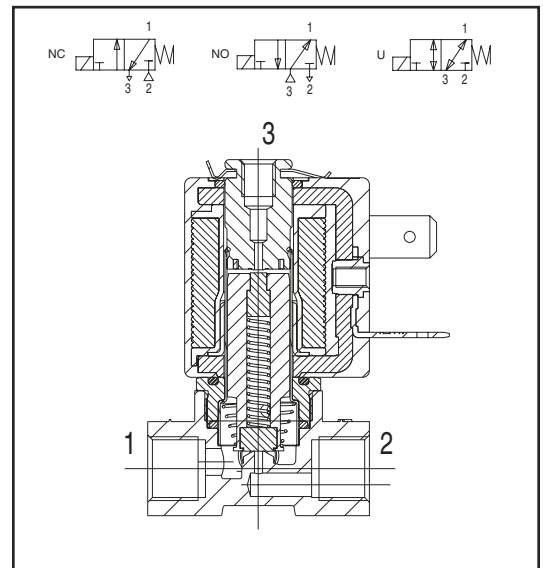
### Kits

1/2" NPT conduit hub kit for leaded coils 224735-001-\*  
(Kit contains 10 pcs of each: threaded hub, gasket, and attaching screw.)

DIN connector kit for SC coils 226061-001-\*  
(Kit contains 10 pcs of each: connector, gasket, and attaching screw.)

Mounting adapter kit 289719 (Kit contains 2 screws and plate.)

M5 to 1/8" port adaptors: HV289666001 (Brass), HV289667001 (SS)  
(Kit contains 10 pcs)



### Approvals

UL recognized coil - File E153691

CSA certified coil - see CSA certificate No. 113111

Meets applicable CE directives

NSF (Designated models only, see table)

- NSF 61 - Drinking water system components
- NSF 169 - Special purpose food Equipment and Devices
- Also certified to NSF/ANSI Standard 61, Annex G (weighted average lead content of  $\leq 0.25\%$ ) and is in compliance with California's Health & Safety Code Section 116875 (commonly known as AB1953) and Vermont Act 193.

The NSF Certification Program is accredited by the Standards Council of Canada and ANSI.

**Specifications (English units)**

Pipe Size (in)	Orifice Size (in)	Cv Flow		Operating Pressure Differential (psi)						Max. Fluid Temp. °F		Brass	Stainless Steel	Const. Ref.	Wattage		Approx. Shipping Weight (lbs.)
		At Port 2	At Port 3	Max. AC			Max. DC			AC	DC				AC	DC	
				Air - Inert Gas	Water	Light Oil @ 300 SSU	Air - Inert Gas	Water	Light Oil @ 300 SSU								
<b>General Service - Normally Closed</b>																	
1/8	3/64	0.06	0.06	215	215	215	215	215	215	180	180	U8356A001V	U8356A013V	1	6.3	6.9	0.5
1/8	1/16	0.09	0.06	145	145	145	145	145	145	180	180	U8356A002V	U8356A014V	1	6.3	6.9	0.5
1/8	3/32	0.13	0.06	60	60	60	60	60	60	180	180	U8356A004V	U8356A016V	1	6.3	6.9	0.5
1/8	7/64	0.15	0.06	35	35	35	35	35	35	180	180	U8356B045V	U8356B046V	2	6.3	6.9	0.6
<b>NSF 61 and 169 Listed - Normally Closed</b>																	
1/8	3/32	0.13	0.04	-	70	-	-	70	-	180	180	-	U8356A103E	1	6.3	6.9	0.5
1/4	3/32	0.13	0.04	-	70	-	-	70	-	180	180	-	U8356A115E	3	6.3	6.9	0.5
<b>General Service - Normally Open</b>																	
1/8	3/64	0.06	0.06	125	125	125	125	125	125	180	180	U8356A005V	U8356A017V	1	6.3	6.9	0.5
1/8	1/16	0.09	0.06	125	125	125	125	125	125	180	180	U8356A006V	U8356A018V	1	6.3	6.9	0.5
1/8	3/32	0.13	0.06	125	125	125	85	85	85	180	180	U8356A008V	U8356A020V	1	6.3	6.9	0.5
1/8	7/64	0.15	0.06	75	75	75	30	30	30	180	180	U8356B054V	U8356B055V	2	6.3	6.9	0.6
<b>NSF 61 and 169 Listed - Normally Open</b>																	
1/8	3/32	0.13	0.04	-	140	-	-	85	-	180	180	-	U8356A107E	1	6.3	6.9	0.5
1/4	3/32	0.13	0.04	-	140	-	-	85	-	180	180	-	U8356A119E	3	6.3	6.9	0.5
<b>General Service - Universal</b>																	
1/8	3/64	0.06	0.06	100	100	100	100	100	100	180	180	U8356A009V	U8356A021V	1	6.3	6.9	0.5
1/8	1/16	0.09	0.06	65	65	65	65	65	65	180	180	U8356A010V	U8356A022V	1	6.3	6.9	0.5
1/8	3/32	0.13	0.06	30	30	30	30	30	30	180	180	U8356A012V	U8356A024V	1	6.3	6.9	0.5
1/8	7/64	0.15	0.06	15	15	15	15	15	15	180	180	U8356B047V	U8356B048V	2	6.3	6.9	0.6
<b>NSF 61 and 169 Listed - Universal</b>																	
1/8	3/32	0.13	0.04	-	35	-	-	35	-	180	180	-	U8356A111E	1	6.3	6.9	0.5
1/4	3/32	0.13	0.04	-	35	-	-	35	-	180	180	-	U8356A123E	3	6.3	6.9	0.5

## Specifications (Metric units)

Pipe Size (in)	Orifice Size (mm)	Kv Flow Factor (m3/h)		Operating Pressure Differential (bar)						Max. Fluid Temp. °C		Brass	Stainless Steel	Const. Ref.	Wattage		Approx. Shipping Weight (kgs.)
				Max. AC			Max. DC										
		At Port 2	At Port 3	Air - Inert Gas	Water	Light Oil @ 300 SSU	Air - Inert Gas	Water	Light Oil @ 300 SSU	AC	DC						
<b>General Service - Normally Closed</b>																	
1/8	1.2	0.05	0.05	15	15	15	15	15	15	82	82	U8356A001V	U8356A013V	1	6.3	6.9	0.22
1/8	1.6	0.08	0.05	10	10	10	10	10	10	82	82	U8356A002V	U8356A014V	1	6.3	6.9	0.22
1/8	2.4	0.11	0.05	4	4	4	4	4	4	82	82	U8356A004V	U8356A016V	1	6.3	6.9	0.22
1/8	2.7	0.13	0.05	2.5	2.5	2.5	2.5	2.5	2.5	82	82	U8356B045V	U8356B046V	2	6.3	6.9	0.27
<b>NSF 61 and 169 Listed - Normally Closed</b>																	
1/8	2.4	0.11	0.03	-	5	-	-	5	-	82	82	-	U8356A103E	1	6.3	6.9	0.22
1/4	2.4	0.11	0.03	-	5	-	-	5	-	82	82	-	U8356A115E	3	6.3	6.9	0.22
<b>General Service - Normally Open</b>																	
1/8	1.2	0.05	0.05	8.5	8.5	8.5	8.5	8.5	8.5	82	82	U8356A005V	U8356A017V	1	6.3	6.9	0.22
1/8	1.6	0.08	0.05	8.5	8.5	8.5	8.5	8.5	8.5	82	82	U8356A006V	U8356A018V	1	6.3	6.9	0.22
1/8	2.4	0.11	0.05	8.5	8.5	8.5	6	6	6	82	82	U8356A008V	U8356A020V	1	6.3	6.9	0.22
1/8	2.7	0.15	0.05	5	5	5	2	2	2	82	82	U8356B054V	U8356B055V	2	6.3	6.9	0.27
<b>NSF 61 and 169 Listed - Normally Open</b>																	
1/8	2.4	0.11	0.03	-	10	-	-	6	-	82	82	-	U8356A107E	1	6.3	6.9	0.22
1/4	2.4	0.11	0.03	-	10	-	-	6	-	82	82	-	U8356A119E	3	6.3	6.9	0.22
<b>General Service - Universal</b>																	
1/8	1.2	0.05	0.05	7	7	7	7	7	7	82	82	U8356A009V	U8356A021V	1	6.3	6.9	0.22
1/8	1.6	0.08	0.05	4.5	4.5	4.5	4.5	4.5	4.5	82	82	U8356A010V	U8356A022V	1	6.3	6.9	0.22
1/8	2.4	0.11	0.05	2	2	2	2	2	2	82	82	U8356A012V	U8356A024V	1	6.3	6.9	0.22
1/8	2.7	0.13	0.05	1	1	1	1	1	1	82	82	U8356B047V	U8356B048V	2	6.3	6.9	0.27
<b>NSF 61 and 169 Listed - Universal</b>																	
1/8	2.4	0.11	0.03	-	2	-	-	2	-	82	82	-	U8356A111E	1	6.3	6.9	0.22
1/4	2.4	0.11	0.03	-	2	-	-	2	-	82	82	-	U8356A123E	3	6.3	6.9	0.22

3-WAY

**Capabilities Chart**

Solenoid Options ②							Base Catalog Number		Resilient Materials ①							Other		Standard Rebuild Kit	
NEMA Type 3-9	High Temp. DIN	Wiring Box Screw Terminal	Multipin	DIN	Spade	Open Frame with Leads	Brass	Stainless Steel	FKM	EPDM	RUBY	Oxygen Service	PTFE	Urethane	Vacuum	Manual Operator	Mounting Bracket	Brass AC/DC	Stainless AC/DC
-	-	-	-	SC	-	●	U8356A001V	U8356A013V	●	E	-	NV	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	U8356A002V	U8356A014V	●	E	-	NV	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	U8356A004V	U8356A016V	●	E	-	NV	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	U8356B045V	U8356B046V	●	E	-	NV	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	-	U8356A103E	-	●	-	-	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	-	U8356A115E	-	●	-	-	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	U8356A005V	U8356A017V	●	E	-	NV	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	U8356A006V	U8356A018V	●	E	-	NV	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	U8356A008V	U8356A020V	●	E	-	NV	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	U8356B054V	U8356B055V	●	E	-	NV	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	-	U8356A107E	-	●	-	-	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	-	U8356A119E	-	●	-	-	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	U8356A009V	U8356A021V	●	E	-	NV	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	U8356A010V	U8356A022V	●	E	-	NV	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	U8356A012V	U8356A024V	●	E	-	NV	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	U8356B047V	U8356B048V	●	E	-	NV	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	-	U8356A111E	-	●	-	-	-	-	-	-	-	-	-
-	-	-	-	SC	-	●	-	U8356A123E	-	●	-	-	-	-	-	-	-	-	-

● = Standard. ① Replace V suffix. ② Replace U prefix with SC prefix.

**Dimensions: inches (mm)**

Const. Ref.		A	B	C	D	E
1	in	1.81	2.08	1.29	1	0.59
	mm	46	53	33	25	15
2	ins	1.98	2.25	.984	1	0.59
	mm	50	57	25	25	15
3	in	1.86	2.25	1.73	1.12	.83
	mm	46	57	44	28	21

**Shown with DIN coil without connector**

1/8 NPT THREADED ADAPTOR PORT 3  
(ADD .59 (15) TO HEIGHT DIMENSIONS)  
KIT #  
BRASS HV289666001  
S. S. HV289667001  
(PKG OF 10 PCS)

M3 - THROUGH HOLES

1/8 NPT (NSF 1/8, 1/4 NPT)