

## Features

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

## Construction

Valve Parts in Contact with Fluids			
	General Purpose		NSF
<b>Body</b>	Brass	316 Stainless Steel	316 Stainless Steel
<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		Silver

## Electrical

Prefix	Standard Coil and Class of Insulation	Watt Rating and Power Consumption				Ambient Temp. °F	Spare Coil Family	
		DC Watts	AC				AC	DC
			Watts	VA Holding	VA Inrush			
U	F	6.9	6.3	8.8	12.1	15 to 140	400115	400115
SC	F	6.9	6.3	8.8	12.1	15 to 140	400125	400125

**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).

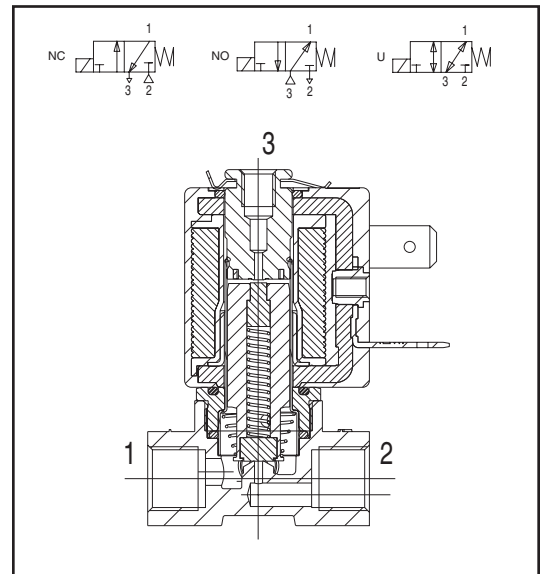
## Kits

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 MH28173

CSA recognized coil - see CSA certificate No. 235748

Meets applicable CE directives

NSF 61 - Drinking water system components

NSF 169 - Special purpose food Equipment and Devices

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

3-WAY

**Specifications (English units)**

Pipe Size (ins.)	Orifice Size (ins.)	Cv Flow		Operating Pressure Differential (psi)						Max. Fluid Temp. °F		Brass	Stainless Steel	Const. Ref.	Wattage		Approx. Shipping Weight (lbs.)
				Max. AC ①			Max. DC ①										
		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	3/64	0.06	0.06	230	235	245	230	235	245	180	180	U8356A001V	U8356A013V	1	6.3	6.9	0.5
1/8	1/16	0.09	0.06	140	140	150	140	140	150	180	180	U8356A002V	U8356A014V	1	6.3	6.9	0.5
1/8	3/32	0.13	0.06	75	72	77	75	72	77	180	180	U8356A004V	U8356A016V	1	6.3	6.9	0.5
1/8	7/64	0.15	0.06	70	61	72	70	61	72	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	175	180	175	150	122	90	180	180	U8356A005V	U8356A017V	1	6.3	6.9	0.5
1/8	1/16	0.09	0.06	165	180	175	75	72	70	180	180	U8356A006V	U8356A018V	1	6.3	6.9	0.5
1/8	3/32	0.13	0.06	160	175	120	86	66	40	180	180	U8356A008V	U8356A020V	1	6.3	6.9	0.5
1/8	7/64	0.15	0.06	148	180	99	148	157	72	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	135	135	135	135	135	100	180	180	U8356A009V	U8356A021V	1	6.3	6.9	0.5
1/8	1/16	0.09	0.06	72	72	72	72	72	72	180	180	U8356A010V	U8356A022V	1	6.3	6.9	0.5
1/8	3/32	0.13	0.06	36	33	40	32	28	40	180	180	U8356A012V	U8356A024V	1	6.3	6.9	0.5
1/8	7/64	0.15	0.06	45	32	27	25	32	27	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

① MS option limits pressures to 220 psi (unless limited by operating pressure).

## Specifications (Metric units)

Pipe Size (ins.)	Orifice Size (mm)	Kv Flow Factor (m <sup>3</sup> /h)		Operating Pressure Differential (bar)						Max. Fluid Temp. °C		Brass	Stainless Steel	Const. Ref.	Wattage		Approx. Shipping Weight (kgs.)
				Max. AC ①			Max. DC ①										
		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	16	16	17	16	16	17	82	82	U8356A001V	U8356A013V	1	6.3	6.9	0.22
1/8	1.6	0.08	0.05	9	9	10	9	9	10	82	82	U8356A002V	U8356A014V	1	6.3	6.9	0.22
1/8	2.4	0.11	0.05	5	5	5	5	5	5	82	82	U8356A004V	U8356A016V	1	6.3	6.9	0.22
1/8	2.7	0.13	0.05	4	4	5	4	4	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	12	12	12	10	8	6	82	82	U8356A005V	U8356A017V	1	6.3	6.9	0.22
1/8	1.6	0.08	0.05	11	12	12	5	5	5	82	82	U8356A006V	U8356A018V	1	6.3	6.9	0.22
1/8	2.4	0.11	0.05	11	12	8	6	4	2	82	82	U8356A008V	U8356A020V	1	6.3	6.9	0.22
1/8	2.7	0.15	0.05	10	12	7	10	10	5	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	9	9	9	9	9	7	82	82	U8356A009V	U8356A021V	1	6.3	6.9	0.22
1/8	1.6	0.08	0.05	5	5	5	5	5	5	82	82	U8356A010V	U8356A022V	1	6.3	6.9	0.22
1/8	2.4	0.11	0.05	2	2	3	2	2	3	82	82	U8356A012V	U8356A024V	1	6.3	6.9	0.22
1/8	2.7	0.13	0.05	3	2	2	1.7	2	2	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

① MS option limits pressures to 15 bar (unless limited by operating pressure).

**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	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	U8356A002V	U8356A014V	●	E	-	NV	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	U8356A004V	U8356A016V	●	E	-	NV	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	U8356B045V	U8356B046V	●	E	-	NV	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	-	U8356A103E	-	●	-	-	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	-	U8356A115E	-	●	-	-	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	U8356A005V	U8356A017V	●	E	-	NV	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	U8356A006V	U8356A018V	●	E	-	NV	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	U8356A008V	U8356A020V	●	E	-	NV	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	U8356B054V	U8356B055V	●	E	-	NV	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	-	U8356A107E	-	●	-	-	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	-	U8356A119E	-	●	-	-	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	U8356A009V	U8356A021V	●	E	-	NV	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	U8356A010V	U8356A022V	●	E	-	NV	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	U8356A012V	U8356A024V	●	E	-	NV	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	U8356B047V	U8356B048V	●	E	-	NV	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	-	U8356A111E	-	●	-	-	-	-	-	MS	-	-	-
-	-	-	-	SC	-	●	-	U8356A123E	-	●	-	-	-	-	-	MS	-	-	-

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

**Dimensions: inches (mm)**

Const. Ref.		A	B	C	D	E
1	ins.	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	ins.	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)