

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 |
| Body | Brass | 316 Stainless Steel | 316 Stainless Steel |
| Core Tube/Bonnet | S.S. / Plated Steel | S.S. / S.S. | S.S. / S.S. |
| Core and Plugnut | Stainless Steel | | |
| Springs | Stainless Steel | | |
| Seals and Disc | FKM | | EPDM |
| Shading Coil | Copper | | Copper |

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).

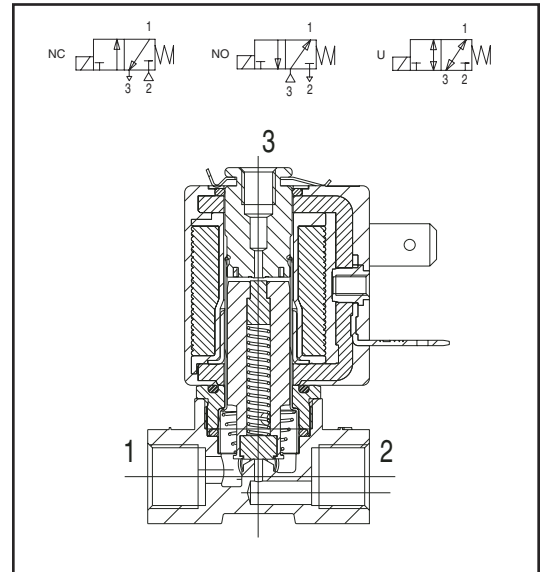
Kits

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

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.) |
|---|-------------------|-----------|-----------|---------------------------------------|-------|---------------------|-----------------|-------|---------------------|---------------------|-----|------------|-----------------|-------------|---------|-----|--------------------------------|
| | | | | 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 | | | | AC | DC | |
| General Service - Normally Closed | | | | | | | | | | | | | | | | | |
| 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 |
| NSF 61 and 169 Listed - Normally Closed | | | | | | | | | | | | | | | | | |
| 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 |
| General Service - Normally Open | | | | | | | | | | | | | | | | | |
| 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 |
| NSF 61 and 169 Listed - Normally Open | | | | | | | | | | | | | | | | | |
| 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 |
| General Service - Universal | | | | | | | | | | | | | | | | | |
| 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 |
| NSF 61 and 169 Listed - Universal | | | | | | | | | | | | | | | | | |
| 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 | | | | AC | DC | |
| General Service - Normally Closed | | | | | | | | | | | | | | | | | |
| 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 |
| NSF 61 and 169 Listed - Normally Closed | | | | | | | | | | | | | | | | | |
| 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 |
| General Service - Normally Open | | | | | | | | | | | | | | | | | |
| 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 |
| NSF 61 and 169 Listed - Normally Open | | | | | | | | | | | | | | | | | |
| 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 |
| General Service - Universal | | | | | | | | | | | | | | | | | |
| 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 |
| NSF 61 and 169 Listed - Universal | | | | | | | | | | | | | | | | | |
| 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 |

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

