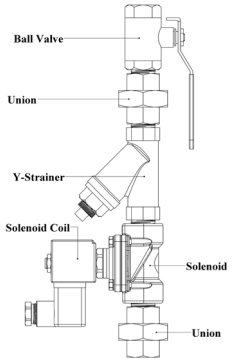
Valve Assembly Submittal

ISIMET JOB #:



ISIMET Valve Assembly

Project Owner:

Project Name:

Project Address:

Notes:

Equipment Specifications Model #:

Controller Selection:

☐ UtC ☐ LA_{v2} Series (KLA, FLA, LA) ☐ DLA ☐ Other

Coil Voltage:

☐ 24 VAC ☐ 24 VDC ☐ 120 VAC ☐ 12 VDC Latching*

*Must be ordered with a 12V Pulse Board unless configured with a DLA-LVL.

Solenoid Series:

☐ 100 ☐ 200 ☐ 220
☐ 300 ☐ 400 ☐ 600
☐ 800 ☐ 810 ☐ 820 ☐ 830

Solenoid Size *(inches)*:

☐ ½ ☐ ¾ ☐ 1 ☐ 1-¼
☐ 1-½ ☐ 2 ☐ 3

Solenoid Wiring Options:

☐ Flex Conduit ☐ Flex Cable

Mounting Style:

☐ Suspended - Horizontally
☐ Wall Mount - Top-to-Bottom ☐ Wall Mount - Bottom-to-Top
☐ Wall Mount - Right-to-Left ☐ Wall Mount - Left-to-Right

Additional Options:

☐ 20 Mesh In-Line (F2) ☐ 80 Mesh In-Line (F8) ☐ Shock Arrestor (A)
☐ Added Union (U) ☐ Explosion Proof (EP) ☐ Medium Pressure (MP)
☐ High Pressure (HP) ☐ Pressure Transmitter (PT) ☐ Stainless-Steel (SS)

Model Numbers:

S -_____ -VA -_____ -____ -_____ -___-___…

(Solenoid Series)	(Coil/Control Voltage)	(Connector)	(Mounting Style)	(Options)
x=Pipe Size (*See Below*) 10*x*: General Service 20*x*: General Service 22*x*: Low-Lead Water 30*x*: Fuel Gas 40*x*: General Service Brass NO 60*x*: Vacuum Systems 80*x*: Oxygen, Acetylene, Argon, & Carbon Dioxide 81*x*: Hydrogen & Nitrogen 82*x*: High-Pressure 83*x*: Helium	1: 24 VAC 2: 120 VAC 5: 12 VDC Latching 6: 24 VDC	1: Flex Conduit 2: Flex Cable	1: Suspended – Horizontally 2: Wall Mount - Top-to-Bottom 3: Wall Mount - Bottom-to-Top 4: Wall Mount - Right-to-Left 5: Wall Mount - Left-to-Right	F2: 20 Mesh In-Line Strainer F8: 80 Mesh In-Line Strainer A: Shock Arrestor U: Added Union EP: Explosion Proof Coils PT: Pressure Transmitter MP: Medium Pressure HP: High-Pressure

(Pipe Size [3rd digit])
1: ½"
2: ¾"
3: 1"
4: 1-¼"
5: 1-½"
6: 2"
7: 3"

ISIMET *Valve Assembly* Model Numbers

ISIMET, LLC. 103 W CJ Wise Pkwy Naples, TX 75568
903-781-6994

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Solenoid Specifications

ISIMET Model	Port Size	Orifice Size	Seat Material	Min. Pressure	Flow Factor	Operation Pressure		24/60 VAC		120/60 VAC	
						Air/Gas	Water	Inrush	Holding	Inrush	Holding
Units	in	in		psi	psi	psi	psi	VA	VA	VA	VA
S-101-SS	1/2	0.50	NBR	0	4.8	230	230	25	14.5	25	14.5
S-102-SS	3/4	0.75	NBR	0	9.8	230	230	25	14.5	25	14.5
S-103-SS	1	1.00	NBR	0	14	230	230	25	14.5	25	14.5
S-201	1/2	0.50	NBR	2	4.8	230	230	25	14.5	25	14.5
S-202	3/4	0.75	NBR	2	9.8	230	230	25	14.5	25	14.5
S-203	1	1.00	NBR	2	14	230	230	25	14.5	25	14.5
S-204	1 1/4	1.38	NBR	2	28	150	150	25	14.5	25	14.5
S-205	1 1/2	1.50	NBR	2	36	150	150	25	14.5	25	14.5
S-206	2	2.00	NBR	2	53	150	150	25	14.5	25	14.5
S-208	3	3.00	BUNA	3	77	225	225	-	-	45	27
S-222	3/4	0.75	FKM/NSF	2	9.8	230	230	25	14.5	25	14.5
S-223	1	1.00	FKM/NSF	2	14	230	230	25	14.5	25	14.5
S-224	1 1/4	1.38	FKM/NSF	2	28	150	150	25	14.5	25	14.5
S-225	1 1/2	1.50	FKM/NSF	2	36	150	150	25	14.5	25	14.5
S-301	1/2	0.71	BUNA	0	4	3	171,600 *	45	27	45	27
S-302	3/4	0.71	BUNA	0	4.9	3	241,500 *	45	27	45	27
S-303	1	1.26	BUNA	0	12	0.75	635,500 *	45	27	45	27
S-304	1 1/4	1.26	BUNA	0	14	0.75	762,700 *	45	27	45	27
S-305	1 1/2	1.89	BUNA	0.015	41	3	2,225,530	45	27	45	27
S-306	2	2.00	BUNA	0.015	50	3	2,732,994	45	27	45	27
S-308	3	3.00	NITRILE	0	93.6	45	5,188,000	-	-	113	113
S-308-HP	3	3.00	NITRILE	0	93.6	45	5,188,000	-	-	113	113
S-401	1/2	0.50	NBR	2	4.8	230	230	25	14	25	14
S-402	3/4	0.75	NBR	2	9.8	230	230	25	14	25	14
S-403	1	1.00	NBR	2	14	230	230	25	14	25	14
S-601	1/2	0.63	NBR	0	2.8	TORR@.003	MERC	25	14.5	25	14.5
S-602	3/4	0.63	NBR	0	2.8	TORR@.003	MERC	25	14.5	25	14.5
S-603	1	1.00	NBR	0	8.3	TORR@.003	MERC	25	14.5	25	14.5
S-605	1 1/2	1.89	BUNA	0.15	41	TORR@.005	MERC	45	27	45	27
S-606	2	2.00	BUNA	0.15	50	TORR@.005	MERC	45	27	45	27
S-801	1/2	0.55	FKM	0	3.1	105	105	57	23	57	23
S-802	3/4	0.71	FKM	0	5.03	105	105	57	23	57	23
S-803	1	1.02	FKM	3	13	225	225	45	27	45	27
S-805	1 1/2	1.50	FKM	3	29	225	225	45	27	45	27
S-806	2	1.97	FKM	3	47	225	225	45	27	45	27
S-811	1/2	0.55	BUNA	0	3.1	105	105	57	23	57	23
S-812	3/4	0.71	BUNA	0	5.03	105	105	57	23	57	23
S-813	1	1.02	BUNA	3	13	225	225	45	27	45	27
S-815	1 1/2	1.50	BUNA	3	29	225	225	45	27	45	27
S-816	2	1.97	BUNA	3	47	225	225	45	27	45	27
S-822	3/4	0.79	BUNA	3	5.9	225	225	45	27	45	27
S-823	1	1.02	BUNA	3	13	225	225	45	27	45	27
S-825	1 1/2	1.50	BUNA	3	29	225	225	45	27	45	27
S-826	2	1.97	BUNA	3	47	225	225	45	27	45	27
S-832	3/4	0.79	PTFE	7.5	5.9	255	-	45	27	45	27
S-833	1	1.02	PTFE	7.5	13	255	-	45	27	45	27
S-835	1 1/2	1.50	PTFE	7.5	29	255	-	45	27	45	27
S-836	2	1.97	PTFE	7.5	47	255	-	45	27	45	27

- *BTU @ 0.60 Specific Gravity W/pressure drop of 0.5inch water column
- Vacuum is rated @ TORR and inches of Mercury For Stainless Steel – Refer to S-100 & S-200 Series Specifications

Valve Assembly Submittal

Solenoid Valve Specifications:
Series 100-SS are Stainless Steel General Service NPT, Normally Closed 0 psi differential Solenoid Valve.
Series 200 are Brass General Service NPT, Normally Closed 2 psi differential Solenoid Valves.
Series 200-SS are Stainless Steel General Service NPT, Normally Closed 2 psi differential Solenoid Valve.
(Use 200-SS for lead free applications where lead free solenoids are not available.)
Series 220 are Lead Free Brass General Service NPT, Normally Closed 2 psi differential Solenoid Valves.
(Series 200 and 220 Solenoids are available W/ DC Latching Coils for use in Water Piping Systems)
Series 300 are Fuel gas, Aluminum construction Normally Closed Solenoid Valves.
(Designed for low pressure fuel gas applications.)
Series 400 are Brass General Service NPT, Normally Open 2 psi differential Solenoid Valves.
(Intended for use as Bypass Valves in Circulated Hot Water Systems.)
Series 500 are Brass General Service NPT, Low Wattage, Normally Closed 3 - 4.5 psi differential Solenoid Valves.
Series 600 are Brass thru 1", 1 ½ & 2 " Aluminum NPT, Normally Closed Solenoid Valves for Vacuum Systems.
(Suitable for Medium to Fine Vacuums only.)
Series 700 are Bronze NPT, Normally Closed Solenoid Valves for Fuel Oil Systems.
Series 800 are Brass NPT, Normally Closed Solenoid Valves for Oxygen, Acetylene, Argon, and CO2 Systems.
Series 810 are Brass NPT, Normally Closed Solenoid Valves for Hydrogen and Nitrogen Systems.
Series 820 are Brass NPT, Normally Closed Solenoid Valves for High Pressure Gas Systems.
Series 830 are Brass NPT, Normally Closed Solenoid Valves for Helium Systems.

General Service Solenoids: Where adverse or harsh operating conditions exists in the water system such as the presence of hard water, then it is recommended that only Series 200 Solenoids with 12-VDC latching coils be utilized and that an extensive routine operating and maintenance program be developed by the end user to counter the effects of these conditions. Where operation of water containing corrosive agents, exotic or harsh mediums are intended for control by solenoid then verify application prior to installation. ISIMET cannot warrant against the effects of hard water, corrosive agents, contaminants, or debris present in the piping system or against effects of exotic or harsh substances. If specific operation conditions are in doubt, contact ISIMET prior to installation.

Maximum operating temperature for the solenoid is 180° F / 82.2° C
Coil Rating: Continuous duty totally encapsulated. Voltage Tolerances: +10%, - 10% of applicable voltage.
All Solenoid Standard Coils have a NEMA 1 Rating. Some valves are available as weather resistant and/or explosion proof.
DC Latching Coils are intended for use in applications where the presence of hard or corrosive water is anticipated to cause premature failure in the operation of the valve.

General Service Solenoids

Body:	Brass
Armature Tube:	Stainless Steel 300
Fixed Core:	Stainless Steel 400
Plunger:	Stainless Steel 400
Spring:	Stainless Steel 300
Shading Ring:	Copper
Orifice:	Brass

Series 220 Lead Free Solenoids

Body:	Lead Free Brass
Armature Tube:	Stainless Steel 300
Fixed Core:	Stainless Steel 400
Plunger:	Stainless Steel 400
Spring:	Stainless Steel 300
Shading Ring:	Copper
Orifice:	Lead Free Brass

Ball Valve Specifications:

Apollo or Nibco Bronze 2-Piece Ball Valve (or equivalent).
All valves are full port, bronze.

Valve Station Suffix:
"TU" – General Service Threaded Union - **150 psi CWP 600 psi CWP MSS SP-110**
"XU" – Non-Union - **150 psi SWP 600 psi CWP MSS SP-110**
Valves for fuel gas systems are UL Listed but are not available with the integral output union (XU) only.
Valves greater than 2" only available in "XU"

Recommend the use of Series 220 for all domestic water systems.
2" Lead Free Solenoids are Currently Not Available. Recommend use of S-200-SS for these applications.
S-301 – S-304 & S-308 are 0 Differential; S-305 & S-306 are 0.015 psi Differential.
Caution should be used if S-305 and S-306 solenoids are used in science lab applications.
For domestic water systems, where minimum pressure differentials across the orifice prohibit the solenoid from functioning properly the Series S-100-SS solenoids should be utilized.