



## S-Series Submittal

### Equipment Specifications Model #:

#### Door Finish Options:

- ☐ White Powder Coat    ☐ Brushed Stainless Steel  
☐ Gray Powder Coat    ☐ GPC Enclosure w/ SS Door

#### Mounting Options:

- ☐ Surface Mount    ☐ Flush Mount    ☐ Semi-Recessed

#### Enclosure Type:

- ☐ Standard with Grommets  
☐ Liquid Tight  
☐ With Vent    ☐ Secondary Vent    ☐ Without Vent

#### Valve/Solenoid Options:

Controlled Medium	Size	Coil Voltage	Options						
			<input type="checkbox"/> U	<input type="checkbox"/> A	<input type="checkbox"/> F2	<input type="checkbox"/> F8	<input type="checkbox"/> PT	<input type="checkbox"/> EP	<input type="checkbox"/> Other_____
			<input type="checkbox"/> U	<input type="checkbox"/> A	<input type="checkbox"/> F2	<input type="checkbox"/> F8	<input type="checkbox"/> PT	<input type="checkbox"/> EP	<input type="checkbox"/> Other_____
			<input type="checkbox"/> U	<input type="checkbox"/> A	<input type="checkbox"/> F2	<input type="checkbox"/> F8	<input type="checkbox"/> PT	<input type="checkbox"/> EP	<input type="checkbox"/> Other_____
			<input type="checkbox"/> U	<input type="checkbox"/> A	<input type="checkbox"/> F2	<input type="checkbox"/> F8	<input type="checkbox"/> PT	<input type="checkbox"/> EP	<input type="checkbox"/> Other_____
			<input type="checkbox"/> U	<input type="checkbox"/> A	<input type="checkbox"/> F2	<input type="checkbox"/> F8	<input type="checkbox"/> PT	<input type="checkbox"/> EP	<input type="checkbox"/> Other_____
			<input type="checkbox"/> U	<input type="checkbox"/> A	<input type="checkbox"/> F2	<input type="checkbox"/> F8	<input type="checkbox"/> PT	<input type="checkbox"/> EP	<input type="checkbox"/> Other_____

*U: Add Union*  
*F2: 20 Mesh Y-Strainer*

*A: Shock Arrestor*  
*F8: 80 Mesh Y-Strainer*

*EP: Explosion Proof*  
*PT: Pressure Transmitter*

#### Door Latch Options:

- ☐ Door Key Lock    ☐ Screwdriver Latch    ☐ Hand Knob

### Verify these Options with ISIMET prior to ordering:

#### Additional Options:

- ☐ Door Louver    ☐ 2-hr Fire Rating    ☐ Ball Valve Only  
☐ Piano Hinge    ☐ T-Handle    ☐ Break Glass Door  
☐ Cooling Fan    ☐ Resets (Circuit Breaker)    ☐ Leadless Valves  
☐ Separate Switches for CW & HW    ☐ Separate Control Sources

#### Piping Flow Orientation:

- ☐ Top-to-Bottom    ☐ Bottom-to-Top    ☐ Left-to-Right  
☐ Right-to-Left    ☐ Top-to-Top    ☐ Bottom-to-Bottom

#### Solenoid Wiring Options:

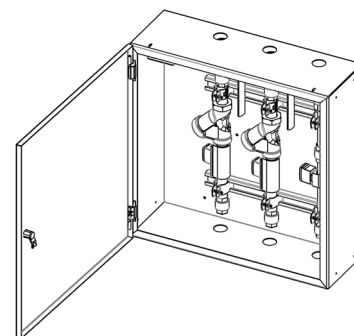
- ☐ Flexible Metal Conduit    ☐ Flexible Cord (SO Cord)

#### S-Series Enclosure Dimensions (inches):

- Length (height):** ☐ 16    ☐ 18    ☐ 24    ☐ 30    ☐ 36  
**Width:**    14    18    ☐ 24    ☐ 30    ☐ 36  
**Depth:**    ☐ 4    ☐ 6    ☐ 8    ☐ 10

*Please verify Enclosure Dimensions with ISIMET.*

ISIMET JOB #:



ISIMET S-Series Enclosure

Project Owner:

Project Name:

Project Address:

Notes:



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### Model Numbers:

### ISIMET S-Series Enclosure Model Numbers

SE	-	-	-	-	-	-	-	-	...
<div><div>(Enclosure Series)</div><div>1: White Powder Coat 2: Brushed Stainless Steel 3: Gray Powder Coat 4: GPC w/ SS Door &amp; Trim</div></div>	<div><div>(Mounting Style)</div><div>1: Surface Mount 2: Flush Mount 3: Semi-Recessed</div></div>	<div><div>(Enclosure Type)</div><div>1: Standard Assembly w/ Grommets 2: LiquidTight w/o Vent 3: LiquidTight w/ Vent 4: LiquidTight w/ Secondary Vent</div></div>	<div><div>(Coil/Control Voltage)</div><div>1: 24 VAC 2: 120 VAC Control by ISIMET 3: 120 VAC Control by Others 4: 120 VAC Coil w/ 24 VAC Control 5: 12 VDC Latching 6: 24 VDC 7: N/A</div></div>	<div><div>(Fluid Configuration)</div><div>A: Air CO2: Carbon Dioxide H: Hydrogen M: Methane O: Oxygen Y: Acetylene HB: Hot Water Bypass HR: Hot Water Return AR: Argon G: Fuel Gas HM: Helium N: Nitrogen V: Vacuum CW: Cold Water Supply HW: Hot Water Supply</div></div>	<div><div>(Pipe Size)</div><div>1: ½" 2: ¾" 3: 1" 4: 1-¼" 5: 1-½" 6: 2" 7: 3"</div></div>	<div><div>(Door Latch)</div><div>S: Slotted Key K: Keyed Lock H: Hand Knob</div></div>	<div><div>(Options)</div><div>G: Break Glass Door L: Door Louver F2: 20 Mesh In-Line Strainer F8: 80 Mesh In-Line Strainer A: Shock Arrestor U: Added Union P: Piano Hinge T: T-Handle LE: Leaded Valves (Water) S: Separate Switches for CW &amp; HW R: Reset Switch CF: Cooling Fan EP: Explosion Proof Coils LH: Left-to-Right RH: Right-to-Left BT: Bottom-to-Top BB: Bottom-to-Bottom TT: Top-to-Top BVO: Ball Valve Only MP: Medium Pressure HP: High Pressure 6: 6" Deep Enclosure 10: 10" Deep Enclosure SC: Separate Control Sources</div></div>		

### 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.**

	General Service Solenoids	Series 220 Lead Free Solenoids
Body:	Brass	Lead Free Brass
Armature Tube:	Stainless Steel 300	Stainless Steel 300
Fixed Core:	Stainless Steel 400	Stainless Steel 400
Plunger:	Stainless Steel 400	Stainless Steel 400
Spring:	Stainless Steel 300	Stainless Steel 300
Shading Ring	Copper	Copper
Orifice:	Brass	Lead Free Brass



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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



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### 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 1/2 & 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.