



Irrigation Solenoid from IrriRich

IrriRich's irrigation solenoid is innovative automatic solenoid designed for solenoid valve. In this catalogue, users will find technical specifications of the new solenoid operators, designed by YAOFENG Company for highest performance in irrigation systems.

Irrigation solenoid from IrriRich are manufactured in a variety of models: including 2way, 3 way,Latch and an optional Built-in 2Wire Decoder/Solenoid (DIAS).

Benefits

Regular Model

- Electromagnets for other voltages are available, Include 12vdc, 24vdc, 24vac, 110vac, 220vac, etc
- Low holding current. It is very helpful for saving energy.
- Compatible with most continuous current controllers available.
- Available with plastic/brass adapter upon request
- Custom-designed or special connector plugs is also available. Just send us the drawing or the detailed model number of the connector.

Latch

- Requires low operating voltage.
- Compatible with most pulse-signal controllers.
- Wide range of operating voltages.
- Requires very short pulse for activation
- Applicable with solar- charged, battery-powered controllers.
- Applicable with remote wireless control system



IrriRich

2-Way Solenoid Actuator

S391 General Description

IrriRich S391 solenoid is used to control the open and close of the various low flow irrigation water valves.

When assembled with the irrigation controller, it can achieve the automatic control of the waterworks system with timing and rationing. An efficient design makes it possible to achieve high pressures with a low inrush and holding current and wide voltage range..



Specification

Voltage: 12VDC, 24 VDC, 24 VAC, 110 VAC, 220 VAC

Allowed deviation from voltage: $\pm 10\%$ Insulation Grade: 500V/min.

Pressure testing: 0-10BAR, one minute, no leakage
Base connection: 3/4" 20 UNEF male threaded

Protection: IP66

Temperature range: Ambient Temp: Max 60 ℃

Fluid Temp: Max 80 $\,^{\circ}$ C

Material: Housing: Reinforced Nylon 66

Plunger and Pole: Passivated Stainless iron

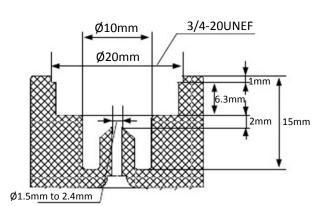
Rubber Seal: NBR or EPDM

Encapsulate: Epoxy

Application:



Operator	Wires Color	Model Number	Operator	Frequency	Current (A)	
type	Wires Color	Model Number	type		Inrush	Holding
2w 12 VDC	Black/ Black	S391D1GXW 12VDC N.O	2w N.O.12 VDC		0.28	0.28
2w 24 VDC	Red/ Red	S391D1GXW 24VDC N.C	2w N.C.24 VDC		0.12	0.12
2w 24 VAC	Black/ Black	S391A1GXW 24VAC N.C	2w N.C.24 VAC	50 Hz/60 Hz	0.25	0.18
2w 110 VAC	Red/ Red	S391A1GXW 110VAC N.C	2w N.C.110VAC	50 Hz/60 Hz	0.10	0.60
2w 220 VAC	Red/ Red	S391A1GXW 220VAC N.C	2w N.C.220 VAC	50 Hz/60 Hz	0.054	0.035



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2-Way Solenoid Actuator

S392 General Description

IrriRich S392 solenoid is used to control the open and close of the various low flow irrigation water valves.

When assembled with the irrigation controller, it can achieve the automatic control of the waterworks system with timing and rationing. An efficient design makes it possible to achieve high pressures with a low inrush and holding current and wide voltage range.



Voltage: 24 VAC, 24 VDC, 12 VDC

Allowed deviation from voltage: $\pm 10\%$ Insulation Grade: 500V/min.

Pressure testing: 0-10BAR, one minute, no leakage

Base connection: 3/4" 20 UNEF male threaded

Protection: IP66

Temperature range: Ambient Temp: Max 60 °C

Fluid Temp: Max 80 ℃

Material: Housing: Coated Metal

Plunger and Pole: Passivated Stainless iron

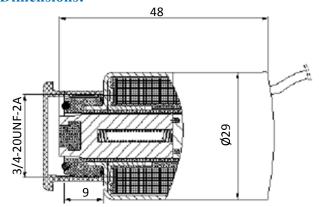
Rubber Seal: NBR or EPDM

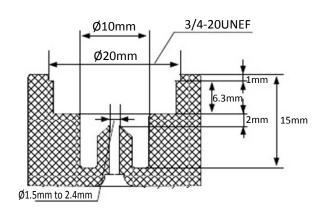
Encapsulate: Epoxy





Operator	Wires color	Operator	Operator	Enganonari	Current (A)	
type	wires color	mark	type	Frequency	Inrush	Holding
2w 24 VAC	Red/ Red	S392A1HXW 24VAC N.C	2w N.C.24 VAC	50 Hz	0.25	0.11
				60 Hz	0.22	0.095
2w 24 VDC	Black/ Black	S392A1HXW 24VDC N.C	2w N.C. 24 VDC	-	0.12	0.12
2w 12 VDC	Blue/ Blue	S392D1HXW 12VDC N.C	2w N.C. 12 VDC	-	0.28	0.28





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2-Way Solenoid Actuator

LATCH General Description

IrriRich 2 way Latch solenoid is used to control the open and close of the various low flow irrigation water valves.

When assembled with the irrigation controller, it can achieve the automatic control of the waterworks system with timing and rationing. An efficient design makes it possible to achieve high pressures with a low inrush and holding current and wide voltage range. The two wire operator consists of one coil with exit of two lead wires. Electrical operation by reversing the current, by using transistors or relays.

Wet metal parts are made of passivated stainless steel for maximum corrosion protection.



Specification Application:

Voltage: $4\sim9$ VDC, $6\sim40$ VDC, 9-30VDC (requires capacitor of 4700μ f)

Insulation Grade: 500V/min.

Pressure testing: 0-10BAR, one minute, no leakage **Base connection:** 3/4" 20 UNEF male threaded

Protection: IP66

Pulse width: 20ms-100ms

Material: Housing: Coated Metal

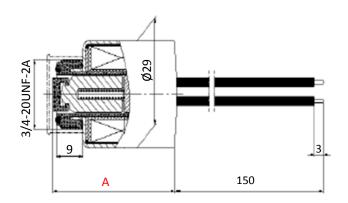
Plunger and Pole: Passivated Stainless iron

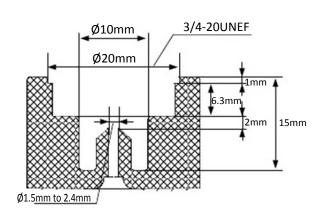
Rubber Seal: NBR or EPDM

Encapsulate: Epoxy



Operator type	Wires color	Operator mark	Frequency	Coil Resistance	A(mm)
2w 4-9 VDC				6 Ω	42
2w 6-40 VDC	Red/ Black	S392C1HXW	50 Hz/60 Hz	6 Ω	42
2w 9-30 VDC				9 Ω	48





3-Way Solenoid Actuator



Regular Model General Description

IrriRich 3 way solenoid is used to control the open and close of the various low flow irrigation water valves. When assembled with the irrigation controller, it can achieve the automatic control of the waterworks system with timing and rationing. An efficient design makes it possible to achieve

high pressures with a low inrush and holding current and wide voltage range.



Specification

Voltage: 24 VAC, 24 VDC, 12 VDC

Allowed deviation from voltage: $\pm 10\%$ Insulation Grade: 500V/min.

Pressure testing: 0-10BAR, one minute, no leakage

Base connection: 3/4" 20 UNEF male threaded

Protection: IP66

Temperature range: Ambient Temp: Max 60 °C

Fluid Temp: Max 80 °C

Material: Housing: Coated Metal

Plunger and Pole: Passivated Stainless iron

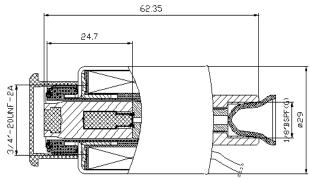
Rubber Seal: NBR or EPDM

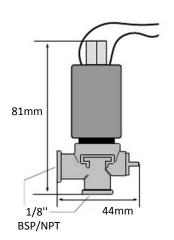
Encapsulate: Epoxy

Application:



O	Wires Color	Model Number	Frequency Current (A)		
Operator Type	Wires Color	Woder Number Frequency		Inrush	Holding
3w N.O. 24VAC	Red / Brown	3W-D-NO-24VAC 50 Hz 0.15		0.15	
	Red / Blowii	3W-D-NO-24VAC	60 Hz	0.14	Holding 0.15 0.14 0.17 0.16 0.25 0.18
3w N.C. 24VAC	Red/Blue	3W-D-NC-24VAC	50 Hz	0.17	0.17
	Red/ Blue	3W-D-NC-24VAC	60 Hz	0.16	Holding 0.15 0.14 0.17 0.16 0.25 0.18
3w-R-N.O. 24VAC	Red	3W-R-NO-24VAC	50 Hz	0.5	
	Red	3W-R-NO-24VAC	60 Hz	0.42	0.18
3w N.O. 24VDC	Black	3W-D-NO-24VDC		0.12	0.12
3w N.O. 12VDC	Blue	3W-D-NO-12VDC		0.28	0.28





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IrriRich

3-Way Solenoid Actuator

LATCH General Description

IrriRich 3 way Latch solenoid is used to control the open and close of the various low flow irrigation water valves.

When assembled with the irrigation controller, it can achieve the automatic control of the waterworks system with timing and rationing.

The Latching type solenoid keeps the magnetic force with no electric power once the pulse triggers it, thus have the distinct effects of saving water and energy.

The two wire operator consists of one coil with exit of two lead wires. Electrical operation by reversing the current, by using transistors or relays. Wet metal parts are made of passivated stainless steel for maximum corrosion protection.



Specification

Voltage: 9~12VDC,9-30VDC Pulse (requires capacitor of 4700μf)

Insulation Grade: 500V/min.

Pressure testing: Based on the Orifice: 1.5 -- Pressure:10 bar

Base connection: 3/4" 20 UNEF male threaded

Protection: IP66

Pulse width: 15ms-100ms

Material: Housing: Coated Metal

Plunger and Pole: Passivated Stainless iron

Rubber Seal: NBR or EPDM

Encapsulate: Epoxy

Application:



Operator type	Wires	Wires color	Model Number	Coil Resistance
3w Latch 9-12 VDC	2	Red/ Black	3w-9/12 VDC- Latch	5.2 Ω
3w Latch 9-30 VDC	2	Red/ Black	3w-9/30 VDC- Latch	9 Ω
3w Latch 9-30 VDC	3	Red/ Black/White	3w-9/30 VDC- Latch-3	9 Ω

