



SAFETY INFORMATION

In accordance with safety regulations and best practices for handling agricultural chemicals, all personnel must adhere to the following PPE requirements:



Eye Protection: Wear safety goggles or face shields to protect against chemical splashes and irritants.



Skin Protection: Long-sleeved clothing, gloves (chemical-resistant), and pants should be worn to minimize skin exposure. Ensure that gloves fit properly and are approved for the chemicals being used.



Respiratory Protection: When handling or applying chemicals that may produce vapors or aerosols, use a respirator that is appropriate for the level of exposure, as specified on the chemical label or safety data sheet (SDS).



Foot Protection: Wear waterproof boots that cover the ankles to protect feet from chemical exposure.

Additional Equipment: Depending on the specific agricultural chemical and application methods, additional PPE such as aprons or full-body suits may be necessary. Always refer to the product label for specific PPE recommendations.

It is essential for all personnel to receive training on the safe handling of agricultural chemicals and the proper use of PPE. Regular inspections of PPE for damage and proper maintenance are also required to ensure maximum protection.

For any questions or clarifications regarding PPE use and safety while handling agricultural chemicals, please consult the SDS for the specific chemical.

SAFETY PRECAUTIONS:

Ensure the power supply is turned off before disconnecting to prevent electric shock. Thoroughly flush the system with fresh water, being sure to cycle pumps and valves during the process ensuring all concentrated chemicals are removed. Keep extremities away from the flow path.

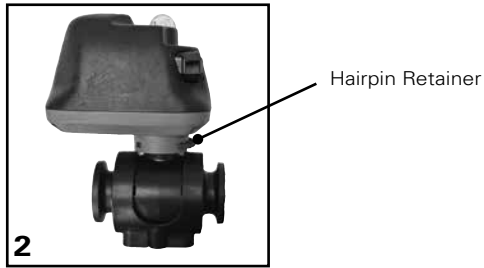
SPECIFICATIONS

SPECIFICATIONS	
Size	1"
Voltage	12 Volt DC
Connection	M100 Flanges
Open/Closed Indicator	Yes
On/Off Response Time	0.8 Second
IP68 Waterproof	Yes
Wiring	On/Off 3 Wire
Connector	4 Pin Deutsch
Maximum Pressure	150 PSI
Storage Temp	-40° to 185° F (-40° C to 85° C)
Operating Temp	-32° to 158° F (-35° C to 70° C)
Optional Handle	Yes
Valve Materials	Glass-filled polypropylene, PTFE seats, stainless steel ball, stem & hardware, Viton® stem o-rings, EPDM valve seal o-rings
Actuator Materials	Glass-filled Nylon, polycarbonate, Viton® & silicone seals
Dimensions	5.67" x 7.43"

TOOLS NEEDED

Phillips Screwdriver	Silicone/dielectric grease
Large Pliers or Vice	Soft towel or rag
Non-marring tool handle of plastic or wood	

1. With the valve closed, remove the two M100 clamps to release the valve from the plumbing.



2. Remove the motorized actuator from the valve by first pulling the black hairpin retainer out of the lower neck of the actuator housing.



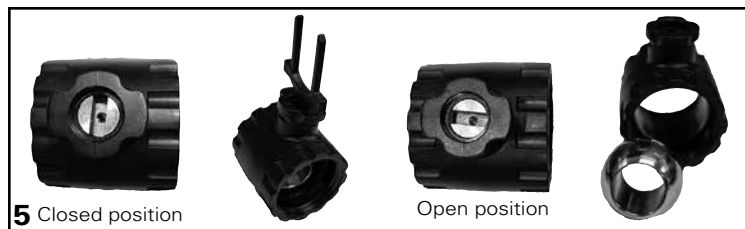
3A. If the valve was installed without the use of mounting brackets, there should be a small Phillips Pan head screw locking each end cap in place. Un-thread these screws and set aside.

3B. If the mounting brackets are still on the valve, remove them.



4A. Remove the valve end caps by unthreading counter-clockwise. If use of large pliers or a vise is required, be sure to protect the valve with a towel or rag.

4B. Each end cap will contain a seat, a seat backing o-ring, and an end cap to valve body sealing o-ring. This o-ring will be in a groove around the end cap on the side facing inward to the valve.



5. With both end caps removed, turn the valve stem 90° to the ON position. This will allow the ball to slide out of the valve body. Be sure to work over a soft surface in case the ball is dropped, to prevent damage.

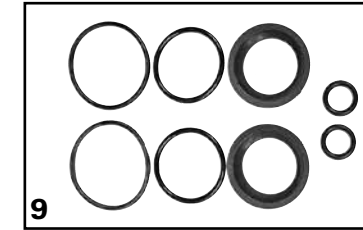


6. Now that the ball is removed, the valve stem can be removed by firmly pushing it into the valve body, by pressing on the top of the stem, at the slot where it engages the motorized actuator.



7. If the stem o-ring seals are to be removed and replaced, they can be cut off. Be sure to take care preventing damage to the valve stem, particularly in the o-ring grooves.

8. Take time to inspect and clean the disassembled valve components. Any deep scratches or pitting will mean the part effected will need to be replaced.



9. Using a DPEV-100-SEALKIT begin re-assembly in the reverse order.



10. With any o-ring seal it is critical to take care during installation and re-assembly. Silicone/dielectric grease is recommended to aid this process. Petroleum based lubricants are not recommended and can damage the valve body seals. During assembly, o-rings may be rolled into place. Pay attention to ensure the seal is not twisted before final valve assembly.



11. The stem seal is one place that one cannot apply too much lubricant. It is best to make sure there is silicone grease present in-between the two stem o-ring seals. This will extend the life of your valve service interval.



12. If the valve stem cannot be pressed back up into the bore, place the valve upside down on the work surface, with the valve resting on the actuator mounting head. A non-marring tool handle of plastic or wood can be placed through the valve body. This will allow additional force to be applied evenly on both sides of the valve to aid full insertion of the stem.



13. Once the valve stem is fully seated, it can be helpful to install one of the end caps before inserting the ball. Be sure to replace the end cap to body seal o-ring, seat back o-ring and seat before threading the end cap back into the body. Remember a small amount of lubricant on this o-ring will ease installation greatly. Push the end cap straight into the valve body at first until the threads make contact. It can help to turn the end cap further counter-clockwise some, to pick up the thread start, before turning clockwise to install the end cap. The end caps are fully seated when the grooves on the body and the grooves on the end cap are aligned.



14. With the valve stem in the open position, align the slot in the ball with the tang of the valve stem. Insert the ball until it contacts the first installed seat. Turn the valve back to the closed position.



15. Prepare the second end cap with the body seal o-ring (don't forget to lubricate), seat and seat-back o-ring. Place this on the bench with the M100 flange facing down, seat facing up.



16A. Flip the partial valve assembly over and onto the prepared end cap. Use the same method as the prior end cap to tighten into place. Make sure the valve turns freely.

16B. If the end caps were locked with the small Phillips Pan Head screws, go ahead and re-install them now.



17. If not, replace the mounting brackets.

18. The valve is now ready to be mounted to the motorized actuator in reverse of its removal, and return to its original location in the system plumbing.

MAINTENANCE

Routine Checks and Cleaning

Always be sure to rinse lines and system with clean water before extended storage or when changing chemicals.

At the end of each season be sure to winterize the system with RV antifreeze. Cycle each valve to ensure a complete purge of water.

WARRANTY

2-year comprehensive pump/meter warranty program, second to none in the industry.

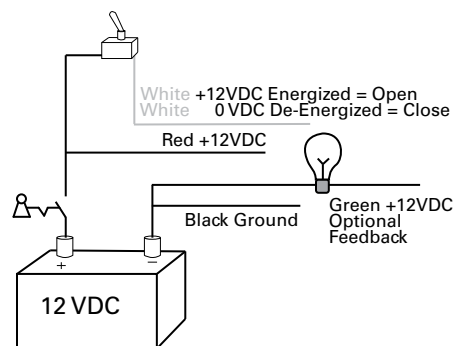
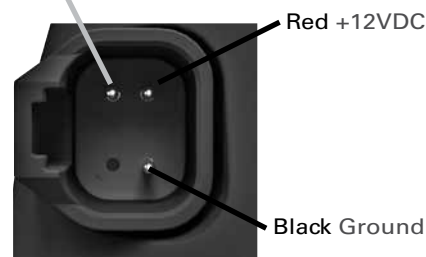
- Warrants that all Dura Products equipment shall be free from defects in material and workmanship
- Equipment that falls under warranty period and parameters will be repaired or replaced and returned at no cost to the customer

RETURN GOODS AUTHORIZATION (RGA/MRGA)

- Call (317)984-4003 or email customerservice@duraproducts.com to request a Return Goods Authorization (RGA/MRGA) number
- Complete and sign RGA/MRGA form ensuring all contact details/return address are correct
- Follow shipping instructions per RGA/MRGA form
- SHIP TO: Dura Products
Warranty Department
504 Demoss Avenue
Arcadia, Indiana 46030

DIAGRAMS - WIRING

White +12VDC Energized = Open
White 0VDC De-Energized = Close



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