

WILKERSON®

Richland, MI 49083

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Installation & Service Instructions
83-273-000

E18/E28 Slow-Start / Quick Dump
Valve and Accessories

ISSUED: April, 2006

Supersedes: November, 2005


Doc. #83273000, ECN# 060325, Rev. 5

WARNING


To avoid unpredictable system behavior that can cause personal injury and property damage:

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect air supply and depressurize all air lines connected to this product before installation, servicing, or conversion.
- Operate within the manufacturer's specified pressure, temperature, and other conditions listed in these instructions.
- Medium must be moisture-free if ambient temperature is below freezing.
- Service according to procedures listed in these instructions.
- Installation, service, and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
- After installation, servicing, or conversion, air and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or the product does not operate properly, do not put into use.
- Warnings and specifications on the product should not be covered by paint, etc. If masking is not possible, contact your local representative for replacement labels.

INSTALLATION

1. Refer to the WARNING above.
 2. Do not install until you have read the entire product information sheet.
 3. Maximum pressure rating is 150 psig (10.3 bar). Temperature range is 40°F to 150°F (4.4°C to 65.5°C).
 4. Prior to installation, insure that the pressure in the air line where this product is to be installed is depressurized (0 psig).
 5. It is recommended to install an appropriate Wilkerson filter upstream of the unit for maximum trouble free operation.
 6. Install with the air flow in the same direction as the arrow on the unit.
 7. AVOID restricting the air flow with undersize piping or fittings, unless maximum flow is not required.
 8. Install the valve to the top of the unit. Follow the supplied instructions with actuating valve for proper installation and wiring if using an electric solenoid actuating valve.
 9. There are two exhaust ports, one in the rear of the unit and one on the down stream side of the unit cap. **INSTALL THE PIPE PLUG IN THE EXHAUST PORT THAT WILL NOT BE USED.**
-  **CAUTION: If plug is not installed securely, plug may dislodge when valve exhausts and could possibly cause injury.**
10. Install the optional muffler, if used, in the active exhaust port.
 11. Turn the adjusting screw one turn open from fully closed for initial setting; this will set the slow start portion of the valve at approximately TEN seconds.

NOTE: Do not over tighten adjusting screw one this could result in damage to the adjusting screw.

 **CAUTION: If adjusting screw is backed out until the threads are disengaged, the adjusting screw could dislodge when pressure is induced.**

12. Apply pressure to the inlet port of the valve.

13. To actuate apply the appropriate voltage signal to actuating valve. Turn the adjusting screw in 1/8 increments, clockwise to increase opening time. Turn the needle counterclockwise to decrease opening time.

NOTE: There will be a slight time delay between the actuating of the valve and the pressure response due to resetting of the internal components.

14. Removing the signal voltage from the activating valve will shut off the supply pressure and depressurize the downstream side (P2) of the valve.

MAINTENANCE

1. Depressurize the air line prior to attempting any service to the unit.
2. Remove bottom plug, valve assembly and valve spring. Inspect all the seals and components for damage and replace as required. Clean all seals and components using a clean soft cloth. Lightly lubricate the valve o-ring and bottom plug o-ring with Magnalube-G lubricant and reassemble in reverse order.
3. Loosen the two screws that retain the top cap and remove it from the unit. Remove the slide valve from the top cap and the two pistons and spring from inside the slide valve. Clean all seals and components of the slide valve pistons. Using a soft cloth, wipe dry the slide valve, piston and internal bore (in cap). Lightly lubricate the slide valve o-ring and piston o-rings with Magnalube-G lubricant.
4. Inspect the top cap for damage and contaminant. Check the internal filter for dogging. If internal filter is clogged, replace as required.
5. Reassemble in reverse order.
6. Remove the needle from the cap and wipe clean. Inspect for damage and replace as required. Prior to reassembly lubricate the threads with grease Lubriplate 630-AA or equivalent and o-ring with Magnalube-G. If needle is damaged, replace cap assembly.
7. The electric actuating valve solenoid can not be serviced internally. If the solenoid fails to operate, remove the solenoid and replace.

WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from The Company, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure and review the information concerning the product or systems in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by The Company and its subsidiaries at any time without notice.

EXTRA COPIES OF THESE INSTRUCTIONS ARE AVAILABLE FOR INCLUSION IN EQUIPMENT / MAINTENANCE MANUALS THAT UTILIZE THESE PRODUCTS. CONTACT YOUR LOCAL REPRESENTATIVE.

REPAIR KITS AND REPLACEMENT PARTS

Actuating Valve with KR mount 24 VDC	VRP-95-776
Actuating Valve with KR mount 120 VAC	VRP-95-777
Actuating Valve with C.N.O.M.A mount 24 VDC	VRP-95-778
Actuating Valve with C.N.O.M.A mount 230 VAC	VRP-95-779
Muffler.....	VRP-95-780
Adjusting Needle Kit	VRP-95-786
Repair Kit.....	VRP-95-782
Valve / Spring Kit	VRP-95-781
Replacement O-ring Kit	VRP-95-783
E18 Body Cap Kit	VRP-95-784
E28 Body Cap Kit	VRP-95-785

WIRING INSTRUCTIONS FOR CABLE PLUG

1. Remove the holding screw (A) from the cable plug, and pry the contact holder (B) from the plug case (C) (see Figure 1).
2. Remove the gland nut (D), thrust washer (E) and gland (F) from the plug case and slide each part over the multiconductor cable in the order removed. Insert cable through the plug case (see Figure 2).
3. Strip the cable as shown in Figure 2.
4. Insert conductors into contacts in contact holder, as shown in the wiring schematic, and securely tighten the contact screws to retain the conductors.
5. Work contact holder back into the plug case and snap it into place.
6. Slide the gland, thrust washer and gland nut into the plug case. Tighten the gland nut to provide strain relief for conductors.
7. Reinsert the holding screw.
8. To connect the cable plug to the solenoid operator, push the plug onto the male terminals and tighten the holding screw.

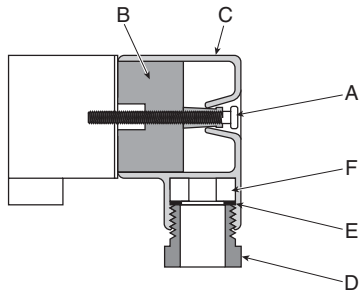


FIGURE 1

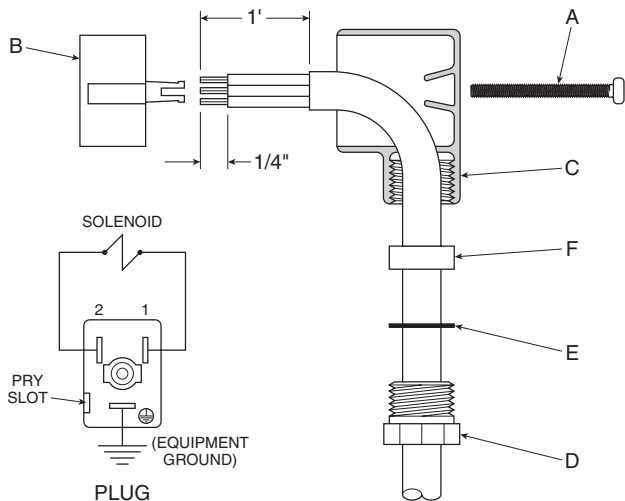


FIGURE 2

