

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Dayton® Magnetically Operated Cylinder Proximity Switch

Description

Dayton Magnetic Proximity sensors are used to sense position on air cylinders from 2 to 6 inch bore. This proven design is rugged yet cost effective. All switches feature a self adjusting clamp that grips standard NFPA and custom cylinders eliminating stocking requirements of many clamps for different bore sizes.

Unpacking

Inspect for any damage that may have occurred during transit. Check the parts list to verify all the parts are accounted for.

General Safety Information

⚠ WARNING Always disconnect, lockout and tag power before attempting to install, service, relocate or perform any maintenance.

1. Read this instruction manual before installing this device.
2. Follow all local electrical and safety codes, the United States National Electric Code (NEC) and Occupational Safety and Health Act (OSHA).
3. Electrical devices must always be securely and adequately grounded.



⚠ WARNING All wiring must be done by a qualified (certified or licensed) electrician.



Assembly

1. Loosen socket head screw with 5/32" Allen wrench.
2. Connect switch to cylinder tie rod as seen in Figure 1.
3. Lightly tighten clamp on the rod so as to be able to adjust (slide) sensor position on cylinder rod.
4. Connect wiring as per appropriate electrical installation chart.
5. While operating cylinder, adjust sensor to desired position.
6. Firmly secure clamp assembly, once desired results are achieved, not exceeding 25 in. lbs.

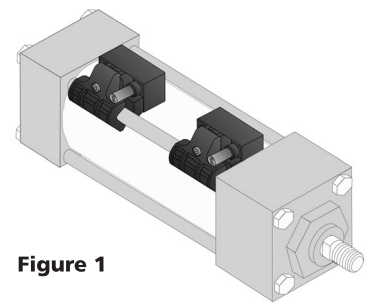
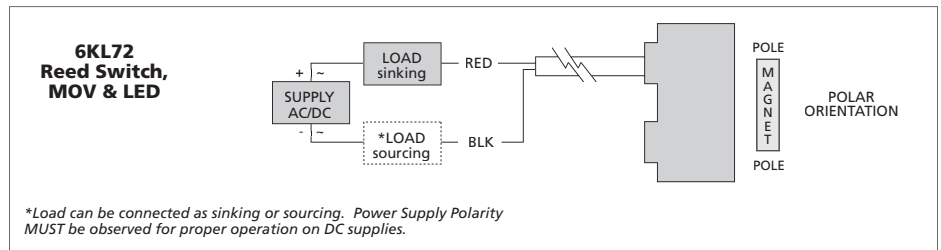


Figure 1

Electrical Installation Chart



Specifications

Part Number	Switch Type	Function	Switching Voltage	Switching Current	Switching Power	Voltage Drop	** Magnetic Sensitivity
6KL72	Reed Switch, MOV & LED	Normally Open SP5T	5 - 240V AC/DC 50/60 Hz	1 Amp Max. .005 Amps Min.	30 watts Max.	3 Volts	85 Ga.

(**) Minimum Gauss rating required for proper operation; as measured on sensor surface.

ENGLISH

ESPAÑOL

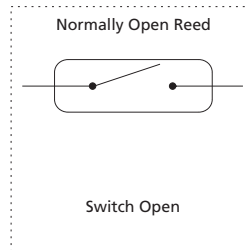
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Dayton® Magnetically Operated Cylinder Proximity Switch

Operation

Reed Switch Working Principle

When a magnetic field moves within proximity of the switch, magnetism is induced into the leads and forces the contacts to close.



Troubleshooting Chart

Symptom	Corrective Action
<u>Reed Switch Model</u>	
Reed Switch works but LED does not light	<ol style="list-style-type: none"> 1. Check current draw of load. It must be > 5 mA for LED to light 2. Check polarity: Red (+) and Black (-) if using DC power supply
Reed switch sticks in closed position	<ol style="list-style-type: none"> 1. Check current draw, power/VA and voltage of load and compare with specs of the appropriate model sensor. These can not be exceeded 2. Voltage/Current spikes may be excessive for your particular load. External transient suppression may be required 3. Long wire runs (greater than 25') can cause capacitance build-up and sticking will result
Current or voltage leakage when reed switch is off	<ol style="list-style-type: none"> 1. Check current, power/VA and voltage rating of load and compare with specs of appropriate model sensor. Those can not be exceeded 2. Reed element was damaged. Consult factory
Reed switch will not turn on	<ol style="list-style-type: none"> 1. Check magnet strength on surface of sensor. It must be >85 Gauss 2. Switch is damaged. Consult factory 3. Check for proper wiring
Reed switch turns on more than once as magnet passes beneath it	<ol style="list-style-type: none"> 1. Check for proper magnet polarity. The poles must be parallel to the switch as shown in the wiring diagram 2. Check for dead spots on the magnet if polarity is correct

LIMITED WARRANTY

DAYTON ONE-YEAR LIMITED WARRANTY. Dayton® Magnetically Operated Cylinder Proximity Switches, Models covered in this manual, are warranted by Dayton Electric Mfg. Co. (Dayton) to the original user against defects in workmanship or materials under normal use for one year after date of purchase. Any part which is determined to be defective in material or workmanship and returned to an authorized service location, as Dayton designates, shipping costs prepaid, will be, as the exclusive remedy, repaired or replaced at Dayton's option. For limited warranty claim procedures, see PROMPT DISPOSITION below. This limited warranty gives purchasers specific legal rights which vary from jurisdiction to jurisdiction.

LIMITATION OF LIABILITY. To the extent allowable under applicable law, Dayton's liability for consequential and incidental damages is expressly disclaimed. Dayton's liability in all events is limited to and shall not exceed the purchase price paid.

WARRANTY DISCLAIMER. Dayton has made a diligent effort to provide product information and illustrate the products in this literature accurately; however, such information and illustrations are for the sole purpose of identification, and do not express or imply a warranty that the products are MERCHANTABLE, or FIT FOR A PARTICULAR PURPOSE, or that the products will necessarily conform to the illustrations or descriptions. Except as provided below, no warranty or affirmation of fact, expressed or implied, other than as stated in the "LIMITED WARRANTY" above is made or authorized by Dayton.

PRODUCT SUITABILITY. Many jurisdictions have codes and regulations governing sales, construction, installation, and/or use of products for certain purposes, which may vary from those in neighboring areas. While Dayton attempts to assure that its products comply with such codes, it cannot guarantee compliance, and cannot be responsible for how the product is installed or used. Before purchase and use of a product, review the product applications, and all applicable national and local codes and regulations, and be sure that the product, installation, and use will comply with them.

Certain aspects of disclaimers are not applicable to consumer products; e.g., (a) some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you; (b) also, some jurisdictions do not allow a limitation on how long an implied warranty lasts, consequently the above limitation may not apply to you; and (c) by law, during the period of this Limited Warranty, any implied warranties of implied merchantability of fitness for a particular purpose applicable to consumer products purchased by consumers, may not be excluded or otherwise disclaimed.

PROMPT DISPOSITION. Dayton will make a good faith effort for prompt correction or other adjustment with respect to any product which proves to be defective within limited warranty. For any product believed to be defective within limited warranty, first write or call dealer from whom the product was purchased. Dealer will give additional directions. If unable to resolve satisfactorily, write to Dayton at address below, giving dealer's name, address, date, and number of dealer's invoice, and describing the nature of the defect. Title and risk of loss pass to buyer on delivery to common carrier. If product was damaged in transit to you, file claim with carrier.

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