



Replacing the Detector Mechanism in SOR Level Controls

General Instructions

SOR Level Controls are designed for easy replacement of the detector mechanism without removing the control from the process. The following steps are recommended for proper replacement.



Electrical power must be disconnected from explosion proof models before the cover is removed. Failure to do so could result in severe personal injury or substantial property damage.

- ❶ Disconnect the external wiring at the terminal block, noting the position of each wire.
- ❷ Mark the location of each detector mechanism on the enclosing tube. Loosen the clamping screw closest to terminal block. Remove the detector mechanism(s) from the enclosing tube.
- ❸ Clamp each replacement detector mechanism on the enclosing tube according to the marks from step 2. If applicable, interlock the lowest detector mechanism with the baffle plate.



To avoid a significant calibration shift, each replacement detector mechanism must be installed to match the position of the original detector mechanism on the enclosing tube.

- ❹ Actuate the detector mechanism. Check continuity to verify detector actuation.
- ❺ Reconnect the external wiring to the terminal block.
- ❻ Arrange the external wiring to avoid interference with the movement of the detector mechanism or housing cover.
- ❼ Replace the housing cover.



Each detector mechanism is factory adjusted for optimal actuation/de-actuation. Do not adjust the detector mechanism without factory instructions.

Ensure that wiring conforms to all applicable local and national electrical codes and install unit(s) according to relevant national and local safety codes.

NOTE: If you suspect that a product is defective, contact the factory or the SOR® Representative in your area for a return authorization number (RMA). This product should only be installed by trained and competent personnel.

*Design and specifications are subject to change without notice.
For latest revision, go to www.sorfinc.net*

NOTE: UL Listed or CSA, ATEX and SAA Certified Level Controls.

The original detector mechanism must be replaced with an identical detector mechanism. Installation of a non-identical detecting mechanism will void agency listing/certification.

Part No.	Description	
3160016	Dry Contact -SPDT	Type A1
3160021	Dry Contact -DPDT	Type A4
3160216	Dry Contact -SPDT (high-temperature)	Type B1
3160221	Dry Contact -DPDT (high-temperature)	Type B4
3160030	Dry Contact -SPDT (anti-vibration)	Type D1
3160033	Dry Contact -DPDT (anti-vibration)	Type D4
3160087	Dry Contact -SPDT (hermetically sealed)	Type F1
3160093	Dry Contact -DPDT (hermetically sealed)	Type F4
3160010	Dry Contact -SPDT (hermetically sealed)	Type L1
3160015	Dry Contact -DPDT (hermetically sealed)	Type L4
†3160307	Dry Contact -SPDT (extra high-temperature)	Type Y1
†3160306	Dry Contact -DPDT (extra high-temperature)	Type Y4

NOTE: DPDT mechanisms consist of two SPDT elements working in tandem.

† Type Y1 and Y4 detector mechanisms are not stackable.
E-Tube should be isolated from the process and brought to ambient temperature before installing Y1 and Y4 type detectors.



Printed in USA

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14685 West 105th Street, Lenexa, KS 66215 ■ 913-888-2630 ■ 800-676-6794 USA ■ Fax 913-888-0767

4/4 Registered Quality System to ISO 9001:2008

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