Fiber-Optic Switch (SW-FOP)
Fiber-Optic Switch (SW-FOP) Operating Instructions

AMS Controls uses highly accurate photo-optic switches for hole and edge-detect pick-ups. Each photo-optic switch uses an NPN output and the user can select between “light” and “dark” mode, depending upon the application.

The TIMER dip-switch must be set to OFF for all applications. The SET dip-switch must be set to D-ON when the photo-eye will be used as an edge-detect to look for the presence of the part. In this instance, the switch will signal the controller once it sees the leading edge of the part.

Please note: this switch is intended for lower-speed applications. For high-speed applications, please contact AMS Controls regarding the High-Speed Fiber-Optic Switch (SW-FOP-L)

Specifications
  
  **Operating Voltage**: 12-24 VDC ± 10%

  **Current**: 40mA

  **Switching Time**: 20-30µs (0.00002-0.00003 seconds)

  **Sensing Range**: 3.25” max.

  **Minimum Bending Radius of Fiber-Optic Cable**: 1”

  **Note**: The fiber-optic cables have a minimum bend radius of 1”. Bending the cables into an arc tighter than 1” will break the cables and render them useless.
Wiring Diagram

ASSY SW-FOP

1) REMOVE FRONT COVER OF E3X-F21
2) SET BOTH SWITCHES TO BOTTOM SETTING
3) REPLACE FRONT COVER

Fiber-Optic Cable Drawing

BENDING RADIUS
1.00" MINIMUM

METRIC M4
THREADES

1.000"
MINIMUM

.125"

4.77"
MAX SEPARATION
(2.00" TYPICAL)

.375"

1.000"
MINIMUM

BENDING RADIUS
1.00" MINIMUM
Enclosure Dimensional Drawings