

# IDEM IDIS Interlock Safety Switches

## IDIS Series Housing

- Tongue (key) (IDIS-1) or lever hinge (IDIS-2) interlock operated
- 90 degree adjustable head
- One 1/2 in. NPT female conduit opening

- 22 mm mounting profile
- Standard and compact housings
- Force guided NC contacts 
- Purchase actuating key separately (See accessories)

See electrical specifications later in this section.

| IDEM IDIS-1 Tongue (Key) Interlock Safety Switches |         |               |               |              |                                              |                            |            |
|----------------------------------------------------|---------|---------------|---------------|--------------|----------------------------------------------|----------------------------|------------|
| Part Number                                        | Price   | Body Material | Head Material | Weight (lbs) | Actuator Travel / Force for Positive Opening | Contact Configuration      | Dimensions |
| <a href="#"><u>IDIS-190051</u></a>                 | \$34.00 | Plastic       | Plastic       | 0.35         | 6mm/12N                                      | 1 N.O., 2 N.C. Slow action | Figure 1   |
| <a href="#"><u>IDIS-190055</u></a>                 | \$34.00 |               |               |              |                                              | 3 N.C. Slow action         | Figure 1   |
| <a href="#"><u>IDIS-190059</u></a>                 | \$34.00 |               |               |              |                                              | 1 N.O., 1 N.C. Snap action | Figure 1   |

**IDIS-190051**



| IDEM IDIS-2 Hinge Interlock Safety Switches |         |               |               |              |                                                |                            |            |
|---------------------------------------------|---------|---------------|---------------|--------------|------------------------------------------------|----------------------------|------------|
| Part Number                                 | Price   | Body Material | Head Material | Weight (lbs) | Actuator Rotation / Force for Positive Opening | Contact Configuration      | Dimensions |
| <a href="#"><u>IDIS-192002</u></a>          | \$31.50 | Plastic       | Plastic       | 0.35         | 7 degrees / 0.5N                               | 1 N.O., 2 N.C. Slow action | Figure 2   |
| <a href="#"><u>IDIS-192005</u></a>          | \$31.50 |               |               |              |                                                | 3 N.C. Slow action         | Figure 2   |
| <a href="#"><u>IDIS-192008</u></a>          | \$31.50 |               |               |              |                                                | 1 N.O., 1 N.C. Snap action | Figure 2   |

**IDIS-192002**



## Dimensions

mm [in]

**Figure 1**

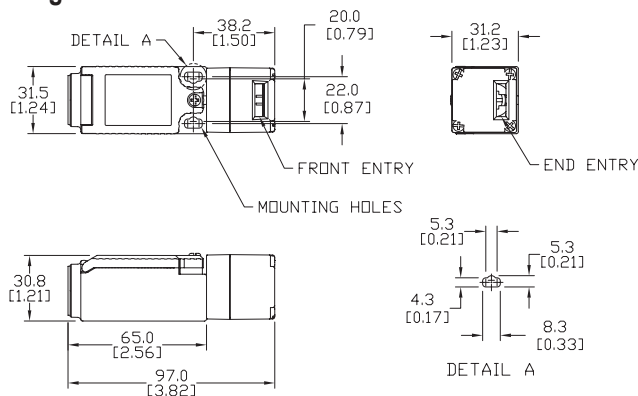
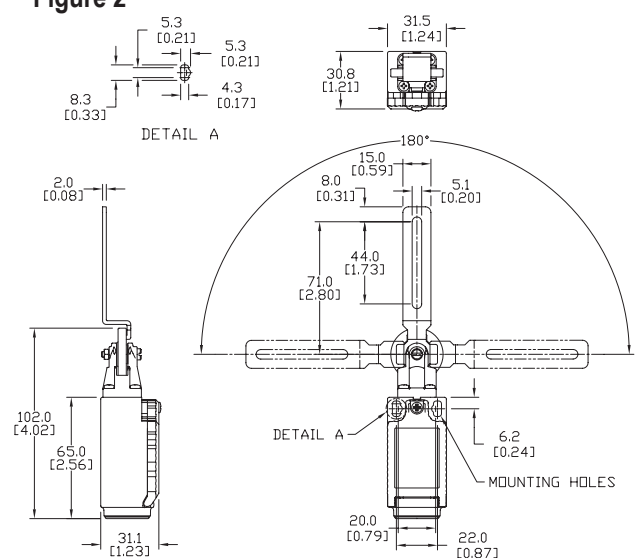


**Figure 2**



# IDEM Interlock Safety Accessories

## Actuator Keys For Use With IDIS-1



- All keys are 316 stainless steel
- Flexible key option available

**140103****140104****140105**

### IDEM Interlock Safety Switch Actuator Tongue (Keys)

| Part Number                   | Price   | Description                                                                          | Minimum Entry Radius | Weight (lb [g]) | Drawings                   |
|-------------------------------|---------|--------------------------------------------------------------------------------------|----------------------|-----------------|----------------------------|
| <a href="#"><u>140103</u></a> | \$10.50 | 14.4 mm mounting hole spacing, 90° bent stainless steel key/mounting tab             | 175mm                | 0.03 [13.6]     | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>140104</u></a> | \$10.50 | 14.4 mm mounting hole spacing, straight stainless steel key/mounting tab             | 175mm                | 0.03 [13.6]     | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>140105</u></a> | \$19.50 | 40mm mounting hole spacing, stainless steel key with polyester flexible mounting tab | 100mm                | 0.06 [27.2]     | <a href="#"><u>PDF</u></a> |

# IDEM Interlock Safety Switches Specifications



| Specifications                             |                                                                                                                                                 |                                                   |                                       |        |                         |      |                                                     |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------------------------|--------|-------------------------|------|-----------------------------------------------------|
|                                            | IDIS                                                                                                                                            | INCH/MK1                                          | HC                                    | KM     | KP/K-SS                 | K-15 | GLx                                                 |
| Safety Classification and Reliability Data |                                                                                                                                                 |                                                   |                                       |        |                         |      |                                                     |
| Switching Reliability (B10d)               | 2.5 x 10 <sup>6</sup> operations at 100mA load                                                                                                  |                                                   |                                       |        |                         |      | 1.5 x 10 <sup>6</sup> operations at 100mA load      |
| ISO 13849-1                                | Up to PLe depending upon system architecture                                                                                                    |                                                   |                                       |        |                         |      |                                                     |
| EN 62061                                   | Up to SIL3 depending upon system architecture                                                                                                   |                                                   |                                       |        |                         |      |                                                     |
| Safety Data - Annual Usage                 | 8 cycles per hour / 24 hours per day / 365 days                                                                                                 |                                                   |                                       |        |                         |      |                                                     |
| Agency Approvals                           | cULus (E258676), CE                                                                                                                             |                                                   |                                       |        |                         |      | cULus (E258676), CE, TUV                            |
| Electrical and General Specifications      |                                                                                                                                                 |                                                   |                                       |        |                         |      |                                                     |
| Conductor Sizes                            | 16-12 AWG (1.5 to 2.5 mm <sup>2</sup> )                                                                                                         |                                                   |                                       |        |                         |      |                                                     |
| Utilization Category                       | AC15, A300, 3A                                                                                                                                  |                                                   |                                       |        |                         |      |                                                     |
| Thermal Current                            | 10A                                                                                                                                             |                                                   |                                       |        |                         |      |                                                     |
| Short Circuit Overload Protection          | External 10A Fast Acting recommended                                                                                                            |                                                   |                                       |        |                         |      |                                                     |
| Rated Insulation Voltage                   | 600VAC                                                                                                                                          |                                                   |                                       | 500VAC |                         |      |                                                     |
| Contact Terminals                          | Stainless steel (Snap action plated brass); Max conductor 1.5 m <sup>2</sup> (IDIS), 2.5 m <sup>2</sup> (KM, K/K-15); 1 N•m [0.74 lb•ft] torque |                                                   |                                       |        |                         |      |                                                     |
| Maximum Switching Current                  | 2.5A @24 VDC 6A @ 120VAC, 3A @ 240VDC (720VA Break)                                                                                             |                                                   |                                       |        |                         |      |                                                     |
| Maximum Approach/Withdrawal Speed          | 600mm/s [23.6 in/s]                                                                                                                             |                                                   |                                       |        |                         |      | NA                                                  |
| Enclosure Protection                       | IP67 (IP69K on all models with both stainless steel head and body)                                                                              |                                                   |                                       |        |                         |      |                                                     |
| Operating Temperature                      | -25°C to 80°C [-13°F to 176°F]                                                                                                                  |                                                   |                                       |        |                         |      |                                                     |
| Vibration                                  | IEC 68-2-6, 10Hz to 55Hz + 1Hz                                                                                                                  |                                                   |                                       |        |                         |      | 10Hz to 500Hz<br>0.35 mm [0.014 in]                 |
| Lid Screws/Torque                          | Plated brass<br>1 N•m [0.74 lb•ft]                                                                                                              | Stainless steel<br>T20 Torx<br>1 N•m [0.74 lb•ft] | Stainless steel<br>1 N•m [0.74 lb•ft] |        |                         |      | Stainless steel<br>T20 Torx<br>1.5 N•m [1.11 lb•ft] |
| Recommended Mounting Screws/Torque         | M4<br>1.5 N•m [1.11 lb•ft]                                                                                                                      | M5<br>4N•m [2.95 lb•ft]                           | M4<br>1.5 N•m [1.11 lb•ft]            |        | M5<br>4N•m [2.95 lb•ft] |      |                                                     |
| Head Screws/Torque                         | Stainless steel, except snap (plated brass)<br>1 N•m [0.74 lb•ft]                                                                               | Stainless steel<br>T20 Torx<br>1 N•m [0.74 lb•ft] | Stainless steel; 1 N•m [0.74 lb•ft]   |        |                         |      |                                                     |

# Safety Products



*Warning: Safety products sold by AutomationDirect are Safety components only. The purchaser/installer is solely responsible for the application of these components and ensuring all necessary steps have been taken to assure each application and use meets all performance and applicable safety requirements and/or local, national and/or international safety codes as required by the application. AutomationDirect cannot certify that our products, used solely or in conjunction with other AutomationDirect or other vendors' products, will assure safety for any application. Any person using or applying any products sold by AutomationDirect is responsible for learning the safety requirements for their individual application and applying them, and therefore assumes all risks, and accepts full and complete responsibility, for the selection and suitability of the product for their respective application.*

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