## 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 Safoty Switches |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Part Number | Price | Body Material | Head Material | Weight (lbs) | Actuator Travel / Force for Positive Opening | Contact Configuration | Dimensions |
| IDIS-190051 |  | Plastic | Plastic | 0.35 | $6 \mathrm{~mm} / 12 \mathrm{~N}$ | 1 N.O., 2 N.C. Slow action | Figure 1 |
| IDIS-190055 |  |  |  |  |  | 3 N.C. Slow action | Figure 1 |
| IDIS-190059 |  |  |  |  |  | 1 N.O., 1 N.C. Snap action | Figure 1 |


| DEM DIS-2 Hinge interlock Safety Switches |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Part Number | Price | Body Material | Head Material | Weight <br> (lbs) | Actuator Rotation / Force for Positive Opening | Contact Configuration | Dimensions |
| IDIS-192002 |  | Plastic | Plastic | 0.35 | 7 degrees / 0.5N | 1 N.O., 2 N.C. Slow action | Figure 2 |
| IDIS-192005 |  |  |  |  |  | 3 N.C. Slow action | Figure 2 |
| IDIS-192008 |  |  |  |  |  | 1 N.O., 1 N.C. Snap action | Figure 2 |



## Dimensions

## mm [in]

Figure 1


Figure 2


## IDEM KM/KM-SS Interlock Safety Switches

## KM/KM-SS Series Housing

- Tongue (key) interlock operated
- 90 degree adjustable head
- 8 actuator entry positions
- One $1 / 2$ in. NPT female conduit opening
- Force guided NC contacts
- 30 mm mounting profile
- Aluminum and 316 stainless steel options available
- Includes one tamper-proof T20 Torx bit
- Purchase actuating key separately. (See accessories)

See electrical specifications later in this section.


IDEM KM /KM-SS Interlock Safety Switches

| Part Number | Price | Body Material | Head Material | Weight (lbs) | Actuator Travel / Force <br> for Positive Opening | Contact Configuration | Dimensions |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| KM-203002 |  | Die-cast aluminum | Die-cast aluminum | 0.92 | $6 \mathrm{~mm} / 12 \mathrm{~N}$ | 1 N.O., 2 N.C. Slow action | Figure 1 |
| KM-203008 |  | Die-cast aluminum | Die-cast aluminum | 0.92 | $6 \mathrm{~mm} / 12 \mathrm{~N}$ | 1 N.O., 3 N.C. Slow action | Figure 1 |
| KM-203011 |  | Die-cast aluminum | Die-cast aluminum | 0.92 | $6 \mathrm{~mm} / 12 \mathrm{~N}$ | 2 N.O., 2 N.C. Slow action | Figure 1 |
| KM-203002-SS |  | Die-cast aluminum | 316 stainless steel | 1.1 | $6 \mathrm{~mm} / 12 \mathrm{~N}$ | 1 N.O., 2 N.C. Slow action | Figure 2 |
| KM-203011-SS |  | Die-cast aluminum | 316 stainless steel | 1.1 | $6 \mathrm{~mm} / 12 \mathrm{~N}$ | 2 N.O., 2 N.C. Slow action | Figure 2 |
| KM-SS-204002 |  | 316 stainless steel | 316 stainless steel | 1.4 | $6 \mathrm{~mm} / 12 \mathrm{~N}$ | 1 N.O., 2 N.C. Slow action | Figure 2 |
| KM-SS-204011 |  | 316 stainless steel | 316 stainless steel | 1.4 | $6 \mathrm{~mm} / 12 \mathrm{~N}$ | 2 N.O., 2 N.C. Slow action | Figure 2 |

## Dimensions

mm [in]
Figure 1


## IDEM KP/K-SS and K-15 Interlock Safety Switches <br> KP/K-SS and K-15 Series Housing

- Tongue (key) interlock operated
- 180 degree adjustable head
- 4 actuator entry positions
- Three $1 / 2$ in. NPT female conduit openings
- Force guided NC contacts
- 40 mm mounting profile
- Purchase actuating key separately. (See accessories.)

See electrical specifications later in this section.


K-SS-208002


IDEM KP/K-SS Interlock Safety Switches

| Part Number | Price | Body Material | Head Material | Weight (lbs) | Actuator Travel/Force for Positive Opening | Contact Configuration | Dimensions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| KP-200002 |  | Plastic | Plastic | 0.7 | $6 \mathrm{~mm} / 12 \mathrm{~N}$ | 1 N.O., 2 N.C. Slow action | Figure 1 |
| KP-200008 |  |  |  |  |  | 1 N.O., 3 N.C. Slow action | Figure 1 |
| KP-200011 |  |  |  |  |  | 2 N.O., 2 N.C. Slow action | Figure 1 |
| KP-200002-SS |  |  | 316 stainless steel | 0.85 |  | 1 N.O., 2 N.C. Slow action | Figure 2 |
| KP-200011-SS |  | Plastic | 316 stainless steel | 0.85 | $6 \mathrm{~mm} / 12 \mathrm{~N}$ | 2 N.O., 2 N.C. Slow action | Figure 2 |
| K-SS-208002 |  | 316 stainless steel |  | 1.63 |  | 1 N.O., 2 N.C. Slow action | Figure 3 |
| $\underline{K-S S-208011}$ |  | 316 stainless steel | 316 stainless steel | 1.63 | 6mm/12N | 2 N.O., 2 N.C. Slow action | Figure 3 |



K-15-207002-SS


|  |  |  | DEM K-15 | terlock | ety Switches |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Part Number | Price | Body Material | Head Material | Weight (lbs) | Actuator Travel / Force for Positive Opening | Contact Configuration | Dimensions |
| K-15-207002 |  | Plastic | Plastic | 0.66 | $6 \mathrm{~mm} / 12 \mathrm{~N}$ | 1 N.O., 2 N.C. Slow action | Figure 4 |
| K-15-207005 |  |  |  |  |  | 3 N.C. Slow action | Figure 4 |
| K-15-207002-SS |  |  | 316 Stainless Steel | 0.8 |  | 1 N.O., 2 N.C. Slow action | Figure 5 |
| $\underline{K-15-207005-S S}$ |  |  |  |  |  | 3 N.C. Slow action | Figure 5 |

## IDEM KP/K-SS and K-15 Interlock Safety Switches

## Dimensions

## mm [in]

Figure 1


Figure 2


Figure 3


Figure 4


Figure 5


## IDEM Interlock Safety Accessories

Actuator Keys

- 14 available keys
- All keys are 316 stainless steel
- Flexible key options available


| DEM Interlock Saifiy Switch Actuator Iongue (Keys) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Part Number | Price | Description | Use with: |  |  |  |  | Weight <br> (Ib) | Minimum Entry Radius | Dimensions |
|  |  |  | IDIS-1 | KP/K15 | $\begin{array}{\|c\|} \hline K-S S / K M / \\ \text { KM-SS } \end{array}$ | INCH | MK1 |  |  |  |
| 140103 |  | 14.4 mm mounting hole spacing, $90^{\circ}$ bent stainless steel key/mounting tab | $\checkmark$ |  |  |  |  | 0.03 | 175mm | Figure 1 |
| 140104 |  | 14.4 mm mounting hole spacing, straight stainless steel key/mounting tab | $\checkmark$ |  |  |  |  | 0.03 | 175 mm | Figure 2 |
| 140105 |  | 40 mm mounting hole spacing, stainless steel key with polyester flexible mounting tab | $\checkmark$ |  |  |  |  | 0.06 | 100mm | Figure 3 |
| 140106 |  | 40 mm mounting hole spacing, $90^{\circ}$ stainless steel key/ mounting tab |  | $\mathbf{V}^{* *}$ |  |  |  | 0.07 | 175mm | Figure 4 |
| 140107 |  | 40 mm mounting hole spacing, $90^{\circ}$ stainless steel key/ mounting tab |  | $\checkmark$ * | $\checkmark$ |  |  | 0.07 | 175 mm | Figure 5 |
| 140108 |  | 20 mm mounting hole spacing, straight stainless steel key with plastic stop |  | $\checkmark$ | $\checkmark$ |  |  | 0.07 | 175mm | Figure 6 |
| 140109 |  | 40 mm mounting hole spacing, stainless steel key with polyester flexible mounting tab |  | $\checkmark$ | $\checkmark$ |  |  | 0.10 | 100mm | Figure 7 |
| 140110 |  | 40 mm mounting hole spacing, stainless steel key with black-painted aluminum flexible mounting tab |  | $\checkmark$ | $\checkmark$ |  |  | 0.16 | 100mm | Figure 8 |
| 140111 |  | 40 mm mounting hole spacing, stainless steel key with mirror polished stainless steel flexible mounting tab |  | $\checkmark$ | $\checkmark$ |  |  | 0.22 | 100mm | Figure 9 |
| 140130 |  | IDEM lockout actuator, stainless steel, for use with IDEM tongue (key) switches |  | $\checkmark$ | $\checkmark$ |  |  |  |  | Figure 10 |
| 140179 |  | IDEM key guide, 316 stainless steel. Mounting hardware included. For use with IDEM INCH series safety switches |  |  |  | $\checkmark$ |  |  | NA | Figure 15 |
| 140179-SS |  | IDEM key guide, 316 stainless steel. For use with IDEM MK1 series safety switches |  |  |  |  | $\checkmark$ |  |  | Figure 15 |
| 140180 |  | IDEM actuator tongue (key), 8 mm mounting hole spacing, 316 stainless steel, 90 degree mounting tab. For use with IDEM MK1 and INCH series safety switches |  |  |  | $\checkmark$ | $\checkmark$ | 0.10 | 150 mm | Figure 16 |
| 140181 |  | IDEM actuator tongue (key), 15 mm mounting hole spacing, 316 stainless steel, straight mounting tab, shock absorbing. For use with IDEM MK1 and INCH series safety switches |  |  |  | $\checkmark$ | $\checkmark$ |  | 150mm | Figure 17 |
| 140182 |  | IDEM actuator tongue (key), 40 mm mounting hole spacing, 316 stainless steel, flexible mounting tab. For use with IDEM MK1 and INCH series safety switches |  |  |  | $\checkmark$ | $\checkmark$ |  | 100mm | Figure 18 |

## IDEM Interlock Safety Accessories

## Accessories

- Gate bolt kits provide a sliding latch and lockout for swinging or sliding doors
- Comes with handle and flat actuator
- Sliding action prevents accidental closure
- Requires four M5 x 45mm mounting hardware (not included)
- Gate bolt kit materials: ABS plastic handle; mild steel yellow plate; aluminum black base; mild steel plated bar (inserts into guide); stainless steel guide and key


IDEM Interlock Safety Switch Accessories

| Part Number | Price | Description | Use with: |  | Weight (lb) | Dimensions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | KM | GBA-1 |  |  |
| GBA-1-210003 |  | IDEM gate bolt, left hand version, for use with KM series safety switches. Includes actuating tongue (key). | $\checkmark$ |  | 3.7 | Figure 11 |
| GBA-1-210004 |  | IDEM gate bolt, right hand version, for use with KM series safety switches. Includes actuating tongue (key). | $\checkmark$ |  | 3.7 | Figure 12 |
| GB-210005 |  | IDEM rear escape handle, for use with GBA-1 and GBL-1 series gate bolts |  | $\checkmark$ | 0.1 | Figure 13 |
| GB-210006 |  | IDEM spring loaded catch, for use with GBA-1 and GBL-1 series gate bolts |  | $\checkmark$ | 0.08 | Figure 14 |

## IDEM Interlock Safety Accessories

## Dimensions

mm [in]

Figure 1


Figure 2


Figure 3


Figure 4


## IDEM Interlock Safety Accessories

## Dimensions

mm [in]
Figure 5


Figure 6


## IDEM Interlock Safety Accessories

## Dimensions

mm [in]
Figure 7


Figure 8


## IDEM Interlock Safety Accessories

## Dimensions

mm [in]

Figure 9


Figure 10


## IDEM Interlock Safety Accessories

## Dimensions

## mm [in]

Figure 11


Figure 12


## IDEM Interlock Safety Accessories

## Dimensions

mm[in]

Figure 13


Figure 15


Figure 17


Figure 14


Figure 16


Figure 18


## IDEM GLM and GLS Safety Rope Switches

## GLM and GLS Series Pull Cord Housings

- Three $1 / 2$ in. NPT female fittings
- Includes one tamper-proof T20 Torx bit
- $57 \mathrm{~mm}, 63 \mathrm{~mm}$, and 65 mm mounting profiles
- Rope Pull kits sold separately and recommended for increased reliability
- $50 \mathrm{~m}, 80 \mathrm{~m}$, and 100 m length systems

See electrical specifications later in this section.

| DEM GLM/GLS Interlock Safety Switches |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Part Number | Price | Construction Material | Weight (lb) | E-Stop | LED | Maximum Rope Length | Contact Configuration | Dimensions |
| GLM-143002 |  | 57 mm die-cast Aluminum | 1.5 | No | No | 50m/164 ft.* | $\begin{aligned} & 1 \text { N.O., } 2 \text { N.C. } \\ & \text { Slow } \end{aligned}$ | Figure 1 |
| GLM-143051 |  |  | 1.5 | No | No |  | 1 N.O., 3 N.C. | Figure 1 |
| GLM-143053 |  |  | 1.5 | No | No |  | 2 N.O., 2 N.C. | Figure 1 |
| GLM-143057 |  |  | 1.6 | Yes | No |  | 1 N.O., 3 N.C. | Figure 1 |
| GLM-143067-AS |  |  | 1.7 | Yes | 24VDC |  | 1 N.O., 3 N.C. | Figure 2 |
| GLM-143067-BS |  |  | 1.7 | Yes | 110VAC |  | 1 N.O., 3 N.C. | Figure 2 |
| GLS-142002 |  | 63mm die-cast Aluminum | 1.75 | No | No | $80 \mathrm{~m} / 262 \mathrm{ft}$. * | 1 N.O., 2 N.C. | Figure 3 |
| GLS-142051 |  |  | 1.75 | No | No |  | 1 N.O., 3 N.C. | Figure 3 |
| GLS-142053 |  |  | 1.75 | No | No |  | 2 N.O., 2 N.C. | Figure 3 |
| GLS-142063 |  |  | 1.85 | Yes | No |  | 1 N.O., 3 N.C. | Figure 3 |
| GLS-142075-AS |  |  | 1.9 | Yes | 24VDC |  | 1 N.O., 3 N.C. | Figure 4 |
| GLS-142075-BS |  |  | 1.9 | Yes | 110VAC |  | 1 N.O., 3 N.C. | Figure 4 |
| GLS-SS-144002 |  | 65 mm stainless steel | 4.2 | No | No | 100m/328 ft.* | 1 N.O., 3 N.C. | Figure 5 |
| GLS-SS-144004 |  |  | 4.2 | No | No |  | 2 N.C., 2 N.O. | Figure 5 |
| GLS-SS-144014 |  |  | 4.3 | Yes | No |  | 1 N.O., 3 N.C. | Figure 5 |
| GLS-SS-144020-AS |  |  | 4.4 | Yes | 24VDC |  | 1 N.O., 3 N.C. | Figure 6 |
| GLS-SS-144020-BS |  |  | 4.4 | Yes | 110VAC |  | 1 N.O., 3 N.C. | Figure 6 |

*See Recommended Rope Span Options and Fittings for number of switches recommended with specific maximum rope lengths.

## Cable Kits for IDEM Cable-Pull Safety Switches

- One end of cables terminated with a thimble, permanent clamp, and a threaded quick link
- Kit includes everything needed for installation
- 4 mm diameter cable with red plastic coating
- 4mm Allen key

Cable Kits for IDEM Cable-Pull Safety Switches

| Part Number | Price | Description | Cable Length | Construction Material | Weight (lb) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 140002 |  | Includes (1) cable, (5) eyebolts, (1) tensioner / gripper and (1) allen key. | $10 \mathrm{~m} / 32 \mathrm{ft}$ | Galvanized steel | 0.8 |
| 140011 |  |  |  | Stainless steel | 1.3 |
| 140004 |  | Includes (1) cable, (9) eyebolts, <br> (1) tensioner / gripper and (1) allen key. | $20 \mathrm{~m} / 65 \mathrm{ft}$ | Galvanized steel | 2.2 |
| 140013 |  |  |  | Stainless steel | 2.9 |
| 140005 |  | Includes (1) cable, (12) eyebolts, <br> (1) tensioner / gripper and (1) allen key. | $30 \mathrm{~m} / 98 \mathrm{ft}$ | Galvanized steel | 2.8 |
| 140014 |  |  |  | Stainless steel | 3.9 |
| 140006 |  | Includes (1) cable, (20) eyebolts, <br> (1) tensioner / gripper and (1) allen key. | $50 \mathrm{~m} / 164 \mathrm{ft}$ | Galvanized steel | 4.5 |
| 140015 |  |  |  | Stainless steel | 6.0 |
| 140007 |  | Includes (1) cable, (30) eyebolts, <br> (2) tensioner / grippers and (1) allen key. | $80 \mathrm{~m} / 262 \mathrm{ft}$ | Galvanized steel | 7.0 |
| 140016 |  |  |  | Stainless steel | 9.5 |



## IDEM Interlock Safety Switches Specifications

| Specifications |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IDIS | KM | KP/K-SS | K-15 | GLM/GLS | INCH/MK1 | HC |
| Safety Classification and Reliability Data |  |  |  |  |  |  |  |
| Switching Reliability (B10d) | $2.5 \times 106$ operations at 100 mA 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, TUV (rope pull switches) |  |  |  |  |  |  |
| Electrical and General Specifications |  |  |  |  |  |  |  |
| Conductor Sizes | 16-12 AWG (1.5 to 2.5 mm 2$)$ |  |  |  |  |  |  |
| Utilization Category | AC15, A300, 3A |  |  |  |  |  |  |
| Thermal Current | 10A |  |  |  |  |  |  |
| Short Circuit Overload Protection | External 10A Fast Acting recommended |  |  |  |  |  |  |
| Rated Insulation Voltage | 500 VAC |  |  |  |  | 600 VAC |  |
| Contact Terminals | Stainless steel (Snap action Plated Brass); Max conductor 1.5 m 2 (IDIS), 2.5 m 2 (KM, K/K-15); 1 Nm torque |  |  |  |  |  |  |
| Max. Switching Current | 2.5A @ 24 VDC 6A @ 120VAC, 3A @ 240VDC (720VA Break) |  |  |  |  |  |  |
| Maximum Approach/Withdrawal Speed | $600 \mathrm{~mm} / \mathrm{s}$ |  |  |  |  |  |  |
| Enclosure Protection | IP67 (IP69K on all models with both stainless steel head and body) |  |  |  |  | IP67 Plastic or IP69K Stainless Steel 316 |  |
| Operating Temperature | -25 C to 80C / -13F to 176F |  |  |  |  |  |  |
| Vibration | IEC 68-2-6, 10-55Hz+1 Hz |  |  |  |  |  |  |
| Lid Screws/Torque | Plated Brass;1Nm ( $0.74 \mathrm{lb}-\mathrm{ft}$ ) | Stainless Steel; T20 Torx; 1 Nm ( $0.74 \mathrm{lb}-\mathrm{ft}$ ) | Stainless St | $0(.74 \mathrm{lb}-\mathrm{ft})$ | Stainless Steel; T20 Torx; 1Nm (0.74 lb-ft) | Stainless Steel; 1 Nm (0.74 lb-ft) |  |
| Recommended Mounting Screws/ Torque | $\begin{gathered} \text { M4; } 1.5 \mathrm{Nm} \\ (1.11 \mathrm{lb-ft}) \end{gathered}$ | M5; 4Nm (2.95 lb-ft) |  |  |  | M4; 1.5 Nm (1.11 lb-ft) |  |
| Head Screws/Torque | Stainless Steel, except snap (Plated Brass);1Nm ( $0.74 \mathrm{lb}-\mathrm{ft}$ ) | Stainless Steel; T20 Torx; 1Nm (0.74 lb-ft) | Stainless Steel; 1 Nm (0.74 lb-ft) |  |  |  |  |

## Electrical Durability

(according to IEC 947-5-1)

AC-15 Slow Action



## 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.
AutomationDirect does not provide design or consulting services, and cannot advise whether any
specific application or use of our products would ensure compliance with the safety requirements for any application.

