## IDEM Solenoid Interlock Safety Switch Selection Guide

|  | KLP-201002 | KLM-202002 | KL3-SS-205002 | KL1-P-221302 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Series | KLP | KLM | KL3-SS | KL1-P |
| Prices start at | \$226.00 | \$251.00 | \$580.00 | \$220.00 |
| Description | Solenoid locking, tongue (key) interlock operated, 1800 N holding force, power to unlock, $90^{\circ}$ adjustable head | Solenoid locking, tongue (key) interlock operated, 2000N holding force, power to unlock, $90^{\circ}$ adjustable head | Solenoid locking, tongue (key) interlock operated, 2000N holding force, power to unlock, $90^{\circ}$ adjustable head | Solenoid locking, tongue (key) interlock operated, 1400 N holding force, power to unlock, $180^{\circ}$ adjustable head |
| Construction Material | 46 mm wide polyester plastic body, 40 mm wide 316 stainless steel head | 46 mm wide die-cast aluminum body, 40 mm wide die-cast aluminum head | 48 mm wide 316 stainless steel body, 40 mm wide 316 stainless steel head | 63 mm wide polyester plastic body, 52 mm wide 316 stainless steel head |
| Degree of Protection (IEC529) | IEC IP67 |  | IEC IP67, IEC IP69K | IEC IP67 |
| Mechanical Service Life | 2.5 M operations at 100 mA load |  |  |  |
| Conduit Opening | 1 conduit opening, $1 / 2$ in female NPT | 3 conduit openings, $1 / 2$ in female NPT |  | 1 conduit opening, $1 / 2$ in female NPT |
| Agency Approvals | cULus E258676, CE |  |  |  |


|  | KL1-SS-220002 | KLTM-450002 | KLT-SS-451002 |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Serios | KL1-SS | K.TM | KLT-SS |
| Prices start at | \$425.00 | \$246.00 | \$482.00 |
| Description | Solenoid locking, tongue (key) interlock operated, 1600 N holding force, power to unlock, <br> $180^{\circ}$ adjustable head | Solenoid locking, tongue (key) interlock operated, 2000N holding force, power to unlock, <br> $180^{\circ}$ adjustable head | Solenoid locking, tongue (key) interlock operated, 2000N holding force, power to unlock, <br> $180^{\circ}$ adjustable head |
| Construction Material | 63 mm wide 316 stainless steel body, 52 mm wide 316 stainless steel head | 105 mm wide die-cast aluminum body, 95 mm wide 316 stainless steel head | 105 mm wide 316 stainless steel body, 95 mm wide <br> 316 stainless steel head |
| Degree of Protection (IEC529) | IEC IP67, IEC IP69K | IEC IP67 | IEC IP69K |
| Mechanical Service Life | 2.5 M operations at 100 mA load |  |  |
| Conduit Opening | 1 conduit opening, 1/2 in female NPT | 3 conduit openings, 1/2 in female NPT |  |
| Agency Approvals | cULus E258676, CE |  |  |

## IDEM Interlock Safety Switch Selection Guide

|  | Inch-1/Inch-3 Series MK1-SS Series |  | HC-1/HC-3 Series | HC-SS Series |
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|  |  |  |  |  |
| Serias | $\begin{aligned} & \text { Inch-1 } \\ & \text { Inch-3 } \end{aligned}$ | MK1-SS | $\begin{aligned} & \mathrm{HC}-1 \\ & \mathrm{HC}-3 \end{aligned}$ | HC-SS |
| Prices start at | \$38.50 | \$122.00 | Retired | Retired |
| Description | Safety switch, tongue (Key) Interlo | operated, 90 degree adjustable | Safety switch, Com | Hinge Interlock |
| Construction Material | 25 mm wide plastic body with metal head | 30 mm wide stainless steel 316 | 25 mm wide plastic body with 316 stainless steel head | 30 mm wide stainless steel 316 |
| Degree of Protection (IEC529) | IP67 | IP69K | IP67 | IP69K |
| Mechanical Service Life | $2.5 \times 106$ operations at 100 mA load |  |  |  |
| Conduit Opening | M16 \& M12 QD | $1 / 2$ in NPT M20 \& M12 QD | M16 \& M12 QD | $1 / 2$ in NPT M20 \& M12 QD |
| Agency Approvals | cULus E258676, CE |  |  |  |



| Serios | 1DS-1 | 1DS-2 | KM | KM-SS |
| :---: | :---: | :---: | :---: | :---: |
| Prices start at | \$34.00 | \$31.50 | \$82.00 | \$166.00 |
| Description | Safety switch, tongue (key) interlock operated, 90 degree adjustable head | Safety switch, lever hinge interlock operated, 90 degree adjustable head | Safety switch, tongue (key) interlock operated, 90 degree adjustable head |  |
| Construction Material | 31.5 mm wide, p | c body and head | 40 mm wide, die-cast aluminum body and head or die-cast aluminum body and 316 stainless steel head | 41.6 mm wide, 316 stainless body and head |
| Degree of Protection (IEC529) | IEC IP67 |  |  | IEC IP67, IEC IP69K |
| Mechanical Service Life | $2.5 \times 106$ operations at 100 mA load |  |  |  |
| Conduit Opening | One conduit opening, $1 / 2$ in. female NPT |  |  |  |
| Agency Approvals | cULus E258676, CE |  |  |  |

## IDEM Interlock Safety Switch Selection Guide

|  |  | K-SS-208002 | K-15-207002 | K-15-207002-SS |
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|  | KP-200002-SS |  |  |  |
| Series | KP | K-SS | K-15 | K-15-SS |
| Prices start at | \$51.00 | \$162.00 | \$50.00 | \$73.00 |
| Description | Safety switch, tongue 180 degree | ey) interlock operated, ustable head | Safety switch, tongue (key) inter | k operated, 180 degree adjustable ad |
| Construction Material | 58 mm wide, plastic body and head or plastic body and 316 stainless head | 58 mm wide, 316 stainless body and head | 54 mm wide, plastic body and head | 54 mm wide, plastic body and 316 stainless head |
| $\begin{array}{\|l} \hline \begin{array}{l} \text { Degree of Protection } \\ \text { (IEC529) } \end{array} \\ \hline \end{array}$ | IEC IP67 | IEC IP67, IEC IP69K |  | P67 |
| Mechanical Service Life | $2.5 \times 106$ operations at 100 mA load |  |  |  |
| Conduit Opening | Three conduit openings, $1 / 2$ in. female NPT |  |  |  |
| Agency Approvals | cULus E258676, CE |  |  |  |


|  | GLM-143067-AS | GLS-142053 | GLS-SS-144020-AS |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Serios | CHM | C.S | CLS-SS |
| Prices start at | \$217.00 | \$183.00 | \$468.00 |
| Description | Safety switch, cable-pull interlock operated, with reset. Protection up to 50 meters ( 164 ft ) | Safety switch, cable-pull interlock operated, with reset. Protection up to 80 meters ( 262 ft ) | Safety switch, cable-pull interlock operated, with reset. Protection up to 100 meters ( 328 ft ) |
| Construction Material | 57 mm wide, die-cast aluminum body | 63 mm wide, die-cast aluminum body | 65 mm wide, 316 stainless steel body |
| Degree of Protection (IEC529) |  | P67 | IEC IP67, IP69K |
| Mechanical Service Life |  | $1.5 \times 106$ operations at 100 mA load |  |
| Conduit Opening |  | Three conduit openings, $1 / 2 \mathrm{in}$. female NPT |  |
| Agency Approvals |  | cULus E258676, CE |  |

## Comepi Safety Switches Selection Guide



| Serics | SP2 Serios | SDM Serios |
| :---: | :---: | :---: |
| Prices start at | Retired | \$21.50 |
| Description | 30 mm safety limit switch with keys or shaft lever | 50 mm safety limit switch with keys, shaft lever or pull wire |
| Material of Construction | Plastic casing, double insulated | ZAMAK (zinc alloy) casing |
| Degree of Protection (IEC529) | IEC IP65 | IEC IP66 |
| Maximum Switching Frequency | Contact blocks: 1 cycle per second (all) | Contact blocks: 1 cycle per second (all) |
| Mechanical Service Life | 1,000,000 operations interlock and limit switches | 1,000,000 operations. interlock and limit switches 500,000 operations for K9800 and K9900 cable pull switches 25,000 operations for K98 and K99 cable pull switches |
| Contact Configuration | X11 - Slow action, positive opening, 1 N.O. +1 N.C. W02 - Simultaneous, slow action, positive opening, 2 N.C. | X11-Slow action, positive opening, 1 N.O. +1 N.C. W02 - Simultaneous, slow action, positive opening, 2 N.C. |
| Conduit Opening | One cable hole, 1/2" NPT adapter | Three cable holes, $1 / 2^{\prime \prime} \mathrm{NPT}$ |
| Connection | $2 \times 2.5 \mathrm{~mm}^{2}$ (AWG14) to $2 \times 0.5 \mathrm{~mm}^{2}$ (AWG 18) | $2 \times 2.5 \mathrm{~mm}^{2}$ (AWG14) to $2 \times 0.5 \mathrm{~mm}^{2}$ (AWG 18) |
| Agency Approvals | CE, UL file E189258, RoHS | CE, UL file E189258, RoHS |



| Serios | SBM Serías | SCM Serías |
| :---: | :---: | :---: |
| Prices start at | Retired | Retired |
| Description | 40 mm safety limit switch with keys or pull wire | 60 mm safety limit switches with keys or pull wire |
| Material of Construction | Aluminum casing | Aluminum casing |
| Degree of Protection (IEC529) | IEC IP66 | IEC IP66 |
| Maximum Switching Frequency | Contact blocks: 1 cycle per second (all) | Contact blocks: 1 cycle per second (all) |
| Mechanical Service Life | 1,000,000 operations. interlock and limit switches 25,000 operations for cable pull switches | 1,000,000 operations interlock and limit switches 500,000 operations for K9800 and K9900 cable pull switches 25,000 operations for K98 and K99 cable pull switches |
| Contact Configuration | X11-Slow action, positive opening, 1 N.O. +1 N.C. W02 - Simultaneous, slow action, positive opening, 2 N.C. <br> X12 - Slow action, <br> positive opening, 1 N.O. + 2 N.C. <br> W03 - Simultaneous, slow action, positive opening 3 N.C. | X11-Slow action, positive opening, 1 N.O. +1 N.C. W02 - Simultaneous, slow action, positive opening, 2 N.C. <br> X12 - Slow action, positive opening, 1 N.O. +2 N.C. W03 - Simultaneous, slow action, positive opening 3 N.C. |
| Conduit Opening | One cable hole, 1/2" NPT | Three cable holes, $1 / 2^{\prime \prime}$ NPT |
| Connection | $2 \times 2.5 \mathrm{~mm}^{2}$ (AWG14) to $2 \times 0.5 \mathrm{~mm}^{2}$ (AWG 18) | $2 \times 2.5 \mathrm{~mm}^{2}$ (AWG14) to $2 \times 0.5 \mathrm{~mm}^{2}$ (AWG 18) |
| Agency Approvals | CE, UL file E189258, RoHS | CE, UL file E189258, RoHS |

## Safety Limit Switches Selection Guide



| Serios | HMM Serías | HLM-ss Serios | -SPS Serios |
| :---: | :---: | :---: | :---: |
| Prices start at | \$78.00 | \$166.00 | \$26.50 |
| Description | Die-cast metal body safety limit switch | Stainless steel body safety limit switch | Plastic body safety limit switch |
| Material of Construction | Die-cast zinc aluminum casing | Stainless steel 316 casing | Plastic casing |
| Degree of Protection (IEC529) | IEC IP67 | IEC IP67/IP69 | IEC IP67 |
| Maximum Switching Frequency | 6,000 operations/day | 6,000 operations/day | 6,000 operations/day |
| Mechanical Service Life | 2,500,000 cycles | 2,500,000 cycles | 2,500,000 cycles |
| Contact Configuration | Each model available with: <br> 2 N.C. / 2 N.O. slow action break before make contacts, or <br> 1 N.O. / 1 N.C. snap action contacts | Each model available with: <br> 2 N.C. / 2 N.O. slow action break before make contacts, or <br> 1 N.O. / 1 N.C. snap action contacts | Each model available with: <br> 2 N.C. / 2 N.O. slow action break before make contacts, or <br> 1 N.O. / 1 N.C. snap action contacts |
| Conduit Opening | One cable hole | One cable hole | One cable hole |
| Connection | 1/2 inch female NPT conduit | 1/2 inch female NPT conduit | 1/2 inch female NPT conduit |
| Agency Approvals | CE, UL (file E258676) | CE, UL (file E258676) | CE, UL (file E258676) |


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| :---: | :---: | :---: | :---: |
| Serics | LSMM Series | LSPM Serics | AP2 Serics |
| Prices start at | \$48.00 | \$36.00 | \$15.50 |
| Description | Panel mount die-cast metal body safety limit switch | Panel mount plastic body safety limit switch | 30 mm limit switches with pull button reset |
| Material of Construction | Die-cast zinc aluminum casing | Plastic casing | Plastic casing, double insulated |
| Degree of Protection (IEC529) | IEC IP67 | IEC IP67 | IEC IP65 |
| Maximum Switching Frequency | 6,000 operations/day | 6,000 operations/day | Contact blocks: 1 cycle per second (all) |
| Mechanical Service Life | 2,500,000 cycles | 2,500,000 cycles | 1,000,000 operations interlock and limit switches |
| Contact Configuration | Each model available with: 2 N.C. / 1 N.O. slow action break before make contacts, or 1 N.O. / 1 N.C. snap action contacts | Each model available with: 2 N.C. / 1 N.O. slow action break before make contacts, or 1 N.O. / 1 N.C. snap action contacts | X11-Slow action break before make, positive opening, 1 N.O. +1 N.C. W02 - Simultaneous, slow action, positive opening, 2 N.C. |
| Conduit Opening | One cable hole | One cable hole | One cable hole, 1/2" NPT adapter |
| Connection | Pigtail; $2 \mathrm{~m} / 6.5 \mathrm{ft}$ cable length | Pigtail; $2 \mathrm{~m} / 6.5 \mathrm{ft}$ cable length | $2 \times 2.5 \mathrm{~mm} 2$ (AWG14) to $2 \times 0.5 \mathrm{~mm} 2$ (AWG 18) |
| Agency Approvals | CE, UL (file E258676) | CE, UL (file E258676) | CE, UL file E189258, CSA 176294, RoHS |



| Serís |
| :--- | :--- |
| Prices Start At |
| Description |
| Material of Construction |
| Megree of Protection (IEC529) |
| Contact Configuration |
| Conduit Opening |
| Connection |
| Agency Approvals |



| Series | KP-EX Series | K-SS-EX Series | KM-EX Series | KM-SS-EX Series |
| :---: | :---: | :---: | :---: | :---: |
| Prices Start At | \$595.00 | \$716.00 | \$635.00 | \$721.00 |
| Description | Safety switch, tongue (key) interlock | Safety switch, tongue (key) interlock | Safety switch, tongue (key) interlock | Safety switch, tongue (key) interlock |
| Material of Construction | Plastic casing | Stainless steel 316 casing | Die-cast zinc aluminum casing | Stainless steel 316 casing |
| Degree of Protection (IEC529) | IP67 | \|P67/IP69 | IP67 | \|P67/IP69 |
| Mechanical Service Life | $2.6 \times 10^{6}$ cycles at 100 mA load | $2.6 \times 10^{6}$ cycles at 100 mA load | $2.6 \times 10^{6}$ cycles at 100 mA load | $2.6 \times 10^{6}$ cycles at 100 mA load |
| Contact Configuration | 2 NC / 2 NO slow action break before make | 2 NC / 2 NO slow action break before make | 2 NC / 2 NO slow action break before make | 2 NC / 2 NO slow action break before make |
| Conduit Opening | Sealed | Sealed | Sealed | Sealed |
| Connection | 3 m [9.84 ft] prewired pigtail cable | 3 m [9.84 ft] prewired pigtail cable | 3 m [9.84 ft] prewired pigtail cable | 3 m [9.84 ft] prewired pigtail cable |
| Agency Approvals | ATEX, IECEx, CE, UR (file E358295) | ATEX, IECEx, CE, UR (file E358295) | ATEX, IECEx, CE, UR (file E358295) | ATEX, IECEx, CE, UR (file E358295) |


| Serios | KP-EX Serías | K-SS-EX Serios | KM-EX Serios | KM-SS-2, Sorios |
| :---: | :---: | :---: | :---: | :---: |
| Prices Start At | \$595.00 | \$716.00 | \$635.00 | \$721.00 |
| Description | Safety switch, tongue (key) interlock | Safety switch, tongue (key) interlock | Safety switch, tongue (key) interlock | Safety switch, tongue (key) interlock |
| Material of Construction | Plastic casing | Stainless steel 316 casing | Die-cast zinc aluminum casing | Stainless steel 316 casing |
| Degree of Protection (IEC529) | IP67 | IP67/IP69 | IP67 | IP67/IP69 |
| Mechanical Service Life | $2.6 \times 10^{6}$ cycles at 100 mA load | $2.6 \times 10^{6}$ cycles at 100 mA load | $2.6 \times 10^{6}$ cycles at 100 mA load | $2.6 \times 10^{6}$ cycles at 100 mA load |
| Contact Configuration | $2 \mathrm{NC} / 2 \mathrm{NO}$ slow action break before make | 2 NC / 2 NO slow action break before make | 2 NC / 2 NO slow action break before make | 2 NC / 2 NO slow action break before make |
| Conduit Opening | Sealed | Sealed | Sealed | Sealed |
| Connection | 3 m [9.84 ft] prewired pigtail cable | 3 m [ 9.84 ft ] prewired pigtail cable | 3 m [ 9.84 ft ] prewired pigtail cable | 3 m [ 9.84 ft ] prewired pigtail cable |
| Agency Approvals | ATEX, IECEx, CE, UR (file E358295) | ATEX, IECEx, CE, UR (file E358295) | ATEX, IECEx, CE, UR (file E358295) | ATEX, IECEx, CE, UR (file E358295) |



K-SS-EX-208026


KM-EX-203026
KM-EX Series


HLM-SS-EX Group
HLM-SS-EX Series


## 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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