



## Overview

Trapped key interlock switches can be configured to provide that a predetermined sequence of events takes place or that hazards have been reduced before operators can become exposed to them.

Trapped key interlock switches have the following features:

- Stainless-steel construction
- 90° key operation
- Compact, solid, and sturdy keys supplied with dust seals and coded tagging

## Design Suggestions for an Interlocking System

Figure 124 - Plant and Machinery Interlocking

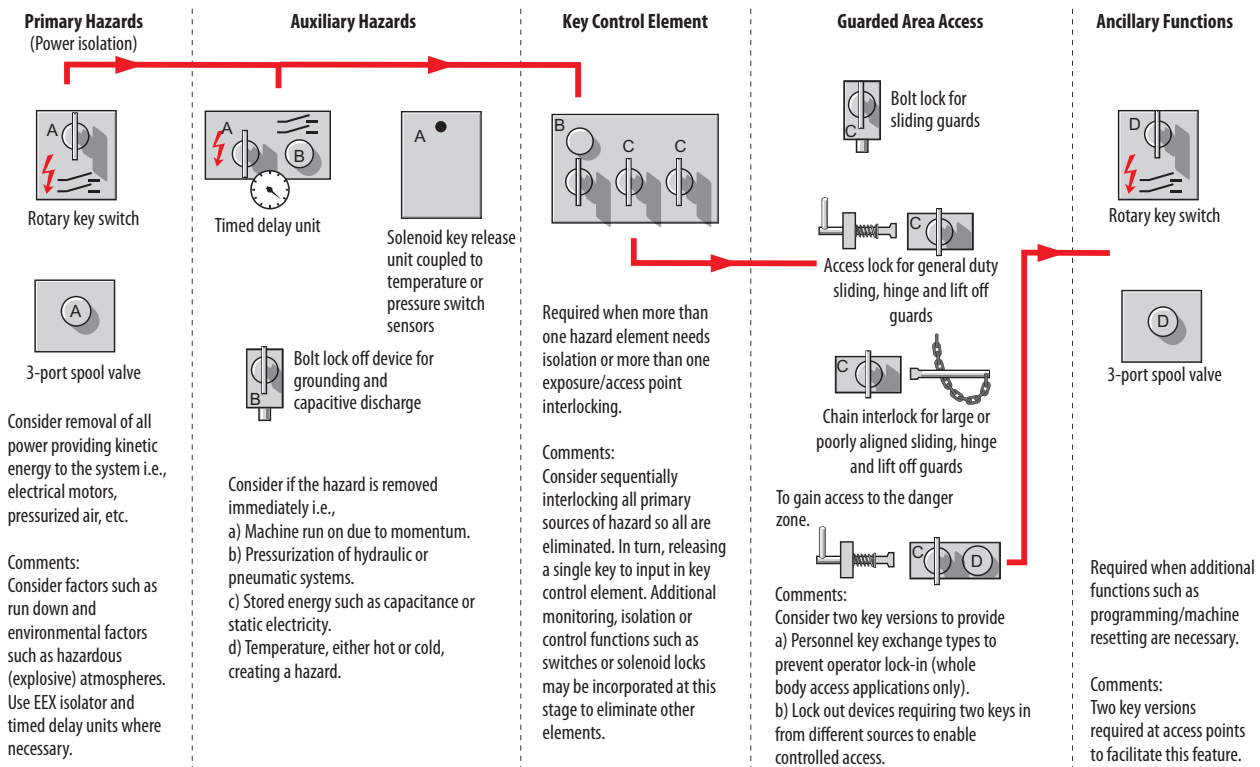
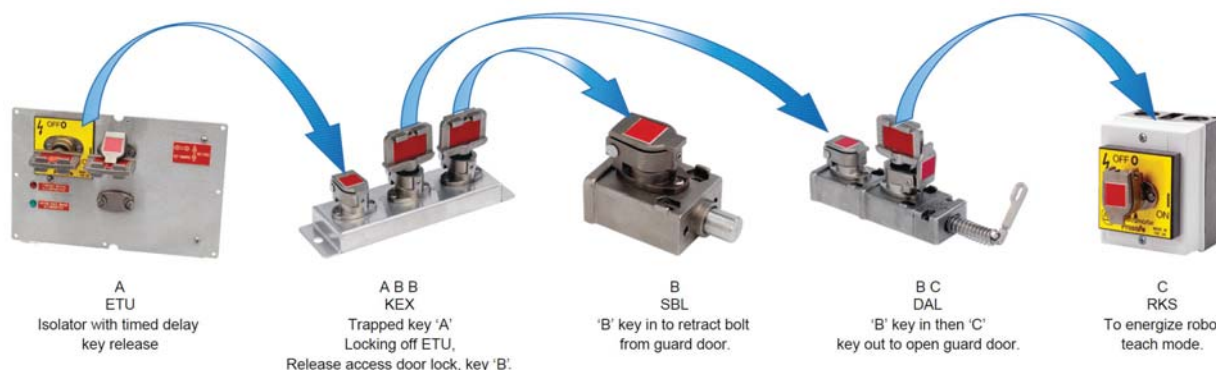


Figure 125 - Illustrated Principles of Trapped Key Interlocking



1. The Electronic Timed-delay Unit (ETU) isolator has two keys. One is a nonremovable key. The other key (an A-coded key) can be removed after a timed duration, which a potentiometer inside the ETU isolator sets. Turn the nonremovable key to turn off the hazardous machine motion and start the timer. When the time expires, the Key Free light-emitting diode turns ON. Remove the A key.
2. Insert the A key into the Key Exchange Unit (KEX) and turn it 90°.
3. Turn one of the B keys 90° and remove it from the KEX. This action traps the A key in the KEX and helps prevent the restarting of the machine.
4. Insert the B key into the Single-key Bolt Lock (SBL) and turn it 90° to gain partial body access to the machine.
5. Turn the second B key 90° and remove it from the KEX. Removal of this key also traps the A key in the KEX and helps prevent the restarting of the machine.
6. Insert the B key into the Dual-key Access Lock (DAL) and turn it 90°.
7. Turn the C key 90° and remove the C key. To allow full body entry into the hazardous zone, rotate the access handle.
8. Take the C key into the hazardous zone, insert it into the rotary keyswitch (RKSE), and turn it 90° to send a signal to the machine control system that allows the machine to operate in a slow or teach mode.
9. To return the machine to full operational mode, reverse the process.

Table 68 - Bill of Materials

Item	Quantity	Description	Cat. No.
1	1	Single key time delayed with an A primary key	440T-MSTUE110A
2	1	Exchange unit, B primary key, two B secondary keys trapped (included)	440T-MKEXE110A0B0B
3	1	Single bolt lock, B primary key	440T-MSBLE100B
4	1	Dual access lock, B primary key, C secondary key trapped (included)	440T-MDALE100B0C
5	1	Rotary keyswitch, C primary code barrel	440T-MRKSE100C
6	1	A key	440T-AKEYE100A

Primary keys must be ordered separately, when not provided for by a previous sequential trapped key. In the previous example, only one primary key must be ordered separately. The remaining primary keys are provided by a previous sequential secondary (trapped) key.

## Application Examples

Figure 126 - Part Body Access

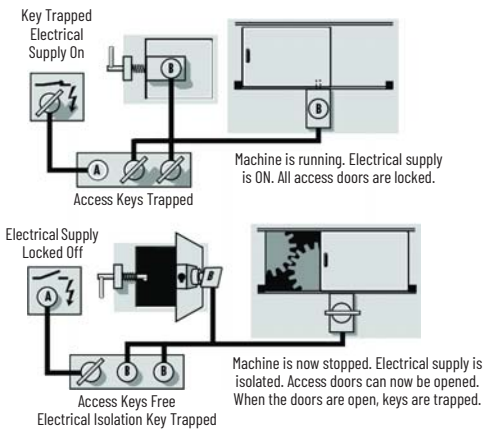
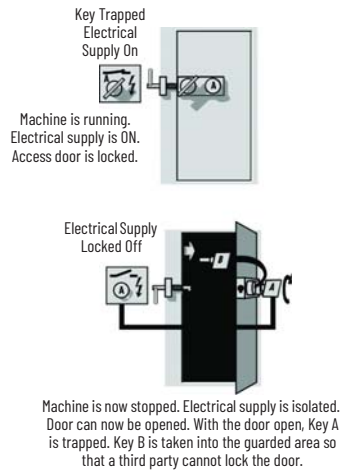


Figure 127 - Full Body Access



## Code Selection

To order Prosafe® trapped key products, you must include codes in the catalog number.

- The codes are added to the end of the catalog number.
- Each code must be two or three characters in length.
- The first code is the primary code and the last codes, if necessary, are the secondary codes.
- Primary codes are not included. The key must be ordered separately or must come from a previous operation.
- Secondary codes come with the product, as the key is trapped in the code barrel.
- Use [Table 71 on page 125](#) to select and track codes.

Table 69 - Order Example 1

<b>440T</b>	-	<b>M</b>	<b>DALE</b>	<b>10</b>	<b>AA</b>	<b>AB</b>
a		b	c	d	e	f

a		b		c		d		e		f	
Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description
440T	Bulletin number	A	Accessory	DALE	Dual-key access lock	10	Product feature	AA	Primary code <sup>(1)</sup> ( <sup>2</sup> )	AB	Secondary code <sup>(1)</sup> ( <sup>3</sup> )
		M	Machine interlock								

- (1) Order catalog number 440T-MDALE10AAAB to get a Dual key Access Lock with an AA primary code and an AB secondary code, with an AB key included.  
 (2) Key not included.  
 (3) Key included.

Table 70 - Order Example 2

440T - M KEXE 16 AA AB AC AC AC  
 a b c d e f g h i

a		b		c		d		e		f		g	
Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description
440T	Bulletin number	A	Accessory	KEXE	Dual-key access lock	16	Product feature	AA	Primary code (1)(2)	AB	Primary code (1)(2)	AC	Secondary code (1)(3)
		M	Machine interlock										

h		i	
Code	Description	Code	Description
AC	Secondary code (1)(3)	AC	Secondary code (1)(3)

- (1) Order catalog number 440T-MKEXE16AAAABACACAC to get a key exchange unit with AA and AB primary codes and three AC secondary codes. The AA and AB keys are not included. The three AC keys, which are trapped in the secondary code barrels, are included.
- (2) Key not included.
- (3) Key included.

### Key Coding

Key codes are available in single, double, and triple letters. Available key codes are A...z, Aa...Zz, Aaa...Eac (first letter A...E; second letter a...f; third letter a...z). There are only 25 letters used - Q is not used.

Examples of key codes in a catalog string:

- 440T-MRPSE110A = key code A
- 440T-MRPSE11AA = key code Aa
- 440T-MRPSE113AAA= key code Aaa

	Code	Application & Date	Code	Application & Date	Code	Appli & Da
Start Down		granulator machine #472 24/3/01  me 67	Aa		Ab	
			Ba		Bb	
			Ca		Cb	
			Da		Db	

Table 71 is an example reference guide that is useful to select and track codes. Single letter codes are ordered with upper case letters. Labels with two or three letter codes have the first letter upper case and the remaining letters lower case.

**Table 71 - Code Selection and Tracking**

Code	Application Date	Code	Application Date	Code	Application Date	Code	Application Date	Code	Application Date	Code	Application Date
Aa		Ab		Ac		Ad		Ae		Af	
Ba		Bb		Bc		Bd		Be		Bf	
Ca		Cb		Cc		Cd		Ce		Cf	
Da		Db		Dc		Dd		De		Df	
Ea		Eb		Ec		Ed		Ee		Ef	
Fa		Fb		Fc		Fd		Fe		Ff	
Ga		Gb		Gc		Gd		Ge		Gf	
Ha		Hb		Hc		Hd		He		Hf	
Ia		Ib		Ic		Id		Ie		If	
Ja		Jb		Jc		Jd		Je		Jf	
Ka		Kb		Kc		Kd		Ke		Kf	
La		Lb		Lc		Ld		Le		Lf	
Ma		Mb		Mc		Md		Me		Mf	
Na		Nb		Nc		Nd		Ne		Nf	
Oa		Ob		Oc		Od		Oe		Of	
Pa		Pb		Pc		Pd		Pe		Pf	
Qa <sup>(1)</sup>		Qb <sup>(1)</sup>		Qc <sup>(1)</sup>		Qd <sup>(1)</sup>		Qe <sup>(1)</sup>		Qf <sup>(1)</sup>	
Ra		Rb		Rc		Rd		Re		Rf	
Sa		Sb		Sc		Sd		Se		Sf	
Ta		Tb		Tc		Td		Te		Tf	
Ua		Ub		Uc		Ud		Ue		Uf	
Va		Vb		Vc		Vd		Ve		Vf	
Wa		Wb		Wc		Wd		We		Wf	
Xa		Xb		Xc		Xd		Xe		Xf	
Ya		Yb		Yc		Yd		Ye		Yf	
Za		Zb		Zc		Zd		Ze		Zf	

(1) Key Code Q only available as Engineered to Order.

## Rotary Switches

The rotary trapped key interlock switches have the following features:

- 316L stainless-steel keys
- Direct-drive operation – positively opens contacts
- Stainless-steel dust cap included
- Up to 100 A isolation
- 4 N.O., 2 N.O. and 2 N.C., 3 N.O./1 N.C., 3 N.O., or 3 N.C. and neutral contacts
- Replaceable code barrel assembly



## Specifications

Attribute	Value				
Standards Classification (Safety)	EN ISO 14119 and GS-ET-31, and can be used in safety application up to category 3, PLD in accordance with EN ISO 13849-1, and in the application area of EN 60204-1.				
Functional Safety Data	PFHD = 1.00E-7 (probability of dangerous failure per hr); T1 = 20 (Proof test interval)				
Certifications	CE Marked for all applicable EU directives, UKCA Marked for all applicable regulations, TÜV Certified <a href="http://rok.auto/certifications">rok.auto/certifications</a>				
Conduit entry	4 x M20 (RKS only)				
Operating temperature [°C (°F)]	-10...+40 (14...104) Enclosed: -25...+40 (-13...+104)				
Mechanical life	200,000 operations				
Shear force to key, max	15.1 kN (3394.62 lbf)				
Torque to key, max [N•m (lb•in)]	14 (10.33)				
Relative humidity	95%				
Finger protection	DIN 57106/VDE 0106 T.100				
Weight	RPSE	10, 11, 12, 13, 20: 500 g (1.1 lb)	14, 16: 1000 g (2.2 lb)		
	RKSE	10, 11, 12, 13: 850 g (1.9 lb)	14: 1250 g (2.8 lb)		
Climatic test	<ul style="list-style-type: none"> <li>• Constant to DIN IEC 68 Part 2-3</li> <li>• Variable to DIN IEC 68 Part 2-30</li> </ul>				
Rated insulation voltage (U <sub>i</sub> )	690V				
Rated impulse withstand voltage (U <sub>imp</sub> )	6 kV				
S3 intermittent rating duty factor (VDE 0530, Part 1)	60/40/25% = 1, 3/1, 6/2 xlu				
Last two digits of Cat. No. (See <a href="#">Product Selection on page 127.</a> )	10, 11, 16	12	13	14	
Rated uninterrupted current (I <sub>u</sub> )	IEC/EN/VDE	20 A	32 A	63 A	100 A
	UL/CSA	16 A	30 A	60 A	100 A
Rated operational voltage (U <sub>e</sub> )	EC/EN/VDE	690V	690V	690V	1000V
	UL/CSA	600V	600V	600V	600V
	Main switch isolation voltage, max	750V	750V	750V	1000V
Rated operating current (I <sub>e</sub> )	AC-21A IEC/EN/VDE	20 A	32 A	63 A	100 A
	AC-1 SEV	20 A	32 A	63 A	100 A
Rated operational power at 50/60 Hz (AC-23A IEC/EN/VDE)	3-phase 220...240V	4 kW	7.5 kW	15 kW	22 kW
	3-pole 380...440V	7.5 kW	15 kW	30 kW	37 kW
	500...690V	7.5 kW	15 kW	30 kW	37 kW
Rated operational power at 50/60 Hz (AC-3A IEC/EN/VDE)	3-phase 220...240V	4 kW	7.5 kW	15 kW	22 kW
	3-pole 380...440V	5.5 kW	11 kW	22 kW	37 kW
	500...690V	5.5 kW	11 kW	22 kW	37 kW
DOL rating (UL/CSA)	3-phase 140V	1.5 HP	3 HP	5 HP	7.5 HP
	3-pole 240V	3 HP	10 HP	15 HP	30 HP
	480V	7.5 HP	20 HP	30 HP	50 HP
	600V	10 HP	20 HP	40 HP	50 HP
Rated breaking capacity	AC-23/AC-3 220...240V	250 A	330 A	500 A	600 A
	Motor switch 80...440V	250 A	330 A	500 A	600 A
	500...690V	150 A	220 A	270 A	600 A
Fuse rating (GI)	330 A	500 A	600 A		
Rated fuse short circuit current, max		25 A	35 A	63/50 A	100 A
Terminal cross section		1...10		4...16	2.5...3.5
		mm <sup>2</sup> single/multiple wire			

Attribute	Value		
Conductor size, mm <sup>2</sup> (min...max)	0.75 ...6	2.5...10	1.5...2.5
	(stranded) with sleeve		
	8 AWG	6 AWG	2 AWG

## Product Selection

Table 72 - Enclosure-mounted IP65 (RKS only)

Contacts	Current	Cat. No. (1)	
		Standard	Engraved
4 N.O.	20 A	440T-MRKSE10x	440T-MRKSS10x
2 N.O. and 2 N.C.	20 A	440T-MRKSE11x	440T-MRKSS11x
4 N.O.	32 A	440T-MRKSE12x	440T-MRKSS12x
4 N.O.	63 A	440T-MRKSE13x	440T-MRKSS13x
3 N.O. and 1 N.O.	3 N.O. 100 A and 1 N.O. 20 A	440T-MRKSE14x	440T-MRKSS14x



(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

Table 73 - Panel Mounted

Contacts	Current	Cat. No. (1)	
		Standard	Engraved
4 N.O.	20 A	440T-MRPSE10x	440T-MRPSS10x
2 N.O. and 2 N.C.	20 A	440T-MRPSE11x	440T-MRPSS11x
4 N.O.	32 A	440T-MRPSE12x	440T-MRPSS12x
4 N.O.	63 A	440T-MRPSE13x	440T-MRPSS13x
3 N.O. and 1 N.O.	3 N.O. 100 A and 1 N.O. 20 A	440T-MRPSE14x	440T-MRPSS14x
8 N.O.	20 A	440T-MRPSE16x	440T-MRPSS16x
3 N.O. and 3 N.C.	20 A	440T-MRPSE18x	440T-MRPSS18x
4 N.O.	40 A	440T-MRPSE20x	440T-MRPSS20x



(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

## Accessories

Figure 128 - Multi-key Isolator Rotary Switch



Table 74 - Multi-key Isolator Rotary Switches

Type	No. of Keys	Contacts	Current	Trapped Key Condition	Cat. No.	
					Standard	Engraved
Dual key isolator <sup>(1)</sup>	2 keys out	4 N.O.	20 A	Both keys are trapped (order separately) Rotate the isolator key 90° CCW to the off position Rotate the second key 90° CCW Remove both keys	440T-MMRSE10xx <sup>(2)</sup>	440T-MMRSS10xx <sup>(2)</sup>
		2 N.O. and 2 N.C.	20 A		440T-MMRSE11xx <sup>(2)</sup>	440T-MMRSS11xx <sup>(2)</sup>
		4 N.O.	32 A		440T-MMRSE12xx <sup>(2)</sup>	440T-MMRSS12xx <sup>(2)</sup>
		4 N.O.	63 A		440T-MMRSE13xx <sup>(2)</sup>	440T-MMRSS13xx <sup>(2)</sup>
Triple key isolator <sup>(1)</sup>	3 keys out	4 N.O.	20 A	All keys are trapped (order separately) Rotate the isolator key 90° CCW to the off position Rotate the second and third keys in sequence 90° CCW Remove all keys	440T-MMRSE20xxx <sup>(2)</sup>	440T-MMRSS20xxx <sup>(2)</sup>
		2 N.O. and 2 N.C.	20 A		440T-MMRSE21xxx <sup>(2)</sup>	440T-MMRSS21xxx <sup>(2)</sup>
		4 N.O.	32 A		440T-MMRSE22xxx <sup>(2)</sup>	440T-MMRSS22xxx <sup>(2)</sup>
		4 N.O.	63 A		440T-MMRSE23xxx <sup>(2)</sup>	440T-MMRSS23xxx <sup>(2)</sup>
Quad key isolator <sup>(1)</sup>	4 keys out	4 N.O.	20 A	All keys are trapped (order separately) Rotate the isolator key 90° CCW to the off position Rotate the second, third, and fourth keys in sequence 90° CCW Remove all keys	440T-MMRSE30xxxx <sup>(2)</sup>	440T-MMRSS30xxxx <sup>(2)</sup>
		2 N.O. and 2 N.C.	20 A		440T-MMRSE31xxxx <sup>(2)</sup>	440T-MMRSS31xxxx <sup>(2)</sup>
		4 N.O.	32 A		440T-MMRSE32xxxx <sup>(2)</sup>	440T-MMRSS32xxxx <sup>(2)</sup>
		4 N.O.	63 A		440T-MMRSE33xxxx <sup>(2)</sup>	440T-MMRSS33xxxx <sup>(2)</sup>

- (1) Isolator on first key out.
- (2) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

Figure 129 - Multi-key Exchange Isolator Rotary Switch



Table 75 - Multi-key Exchange Isolator Rotary Switches

Type	No. of Keys	Contacts	Current	Trapped Key Condition	Cat. No.	
					Standard	Engraved
Dual key exchange isolator <sup>(1)</sup>	1 key in/ 1 key out	4 N.O.	20 A	Primary key 1 is free (order separately) Secondary key 1 is trapped (included w/ product) Insert the primary key 1 and rotate 90° CW Primary key 1 is now trapped Rotate the secondary key 1 90° CCW to turn the isolator to the off position Remove the secondary key	440T-MMRXE10xy <sup>(1)(2)</sup>	440T-MMRXS10xy <sup>(1)(2)</sup>
		2 N.O. and 2 N.C.	20 A		440T-MMRXE11xy <sup>(1)(2)</sup>	440T-MMRXS11xy <sup>(1)(2)</sup>
		4 N.O.	32 A		440T-MMRXE12xy <sup>(1)(2)</sup>	440T-MMRXS12xy <sup>(1)(2)</sup>
		4 N.O.	63 A		440T-MMRXE13xy <sup>(1)(2)</sup>	440T-MMRXS13xy <sup>(1)(2)</sup>
Triple key exchange isolator <sup>(1)</sup>	1 key in/ 2 keys out	4 N.O.	20 A	Primary key 1 is free (order separately) Secondary keys 1 and 2 are trapped (included w/ product) Insert the primary key 1 and rotate 90° CW Primary key 1 is now trapped Rotate secondary key 1 90° CCW to turn isolator to the off position Remove secondary keys 1 and 2	440T-MMRXE20xyy <sup>(1)(2)</sup>	440T-MMRXS20xyy <sup>(1)(2)</sup>
		2 N.O. and 2 N.C.	20 A		440T-MMRXE21xyy <sup>(1)(2)</sup>	440T-MMRXS21xyy <sup>(1)(2)</sup>
		4 N.O.	32 A		440T-MMRXE22xyy <sup>(1)(2)</sup>	440T-MMRXS22xyy <sup>(1)(2)</sup>
		4 N.O.	63 A		440T-MMRXE23xyy <sup>(1)(2)</sup>	440T-MMRXS23xyy <sup>(1)(2)</sup>
Quad key exchange isolator <sup>(1)</sup>	1 key in/ 3 keys out	4 N.O.	20 A	Primary key 1 is free (order separately) Secondary keys 1, 2, and 3 are trapped (included w/ product) Insert primary key 1 and rotate 90° CW Primary key 1 is now trapped Rotate the secondary key 1 90° CCW to operate the isolator and remove Remove secondary keys 1, 2, and 3	440T-MMRXE30xyyy <sup>(1)(2)</sup>	440T-MMRXS30xyyy <sup>(1)(2)</sup>
		2 N.O. and 2 N.C.	20 A		440T-MMRXE31xyyy <sup>(1)(2)</sup>	440T-MMRXS31xyyy <sup>(1)(2)</sup>
		4 N.O.	32 A		440T-MMRXE32xyyy <sup>(1)(2)</sup>	440T-MMRXS32xyyy <sup>(1)(2)</sup>
		4 N.O.	63 A		440T-MMRXE33xyyy <sup>(1)(2)</sup>	440T-MMRXS33xyyy <sup>(1)(2)</sup>

- (1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.
- (2) Substitute the desired secondary code for y (key included). See [Key Coding on page 124](#) for code selection.

Description	Additional Information	Cat. No.
Stainless-steel key	See <a href="#">Accessories on page 166</a> .	440T-AKEYE10x <sup>(1)</sup>
Stainless-steel replacement code barrel for products other than 100 A RPS/RKS units		440T-ASCBE14x <sup>(1)</sup>
Stainless-steel replacement code barrel for 100 A unit rotary switch		440T-ASCBE11x <sup>(1)</sup>
Stainless-steel weatherproof replacement dust cap		440T-ASFCE10x <sup>(1)</sup>
Cable grip, M20 conduit, accommodates cable diameter 7...10.5 mm (0.27...0.41 in.)	—	440A-AO9028
Adapter, conduit, M20 to 1/2 inch NPT, plastic	—	440A-AO9042
Supplemental contact block, 20 A, 1 N.O. late make, early break 1 N.C. auxiliary	For use with RPSE12, RPSE20 (1 per switch, max)	440T-AACA10
Supplemental contact block, 20 A, 2 N.O. late make, early break	For use with RPSE12, RPSE20 (1 per switch, max)	440T-AACA11
Supplemental contact block, 20 A, 1 N.O., 1 N.C.	For use with RPSE13 and 14	440T-AACA20
Supplemental contact block, 20 A, 2 N.O.	For use with RPSE13 and 14	440T-AACA21

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

## Approximate Dimensions

Figure 130 - MRSE10 [mm (in.)]

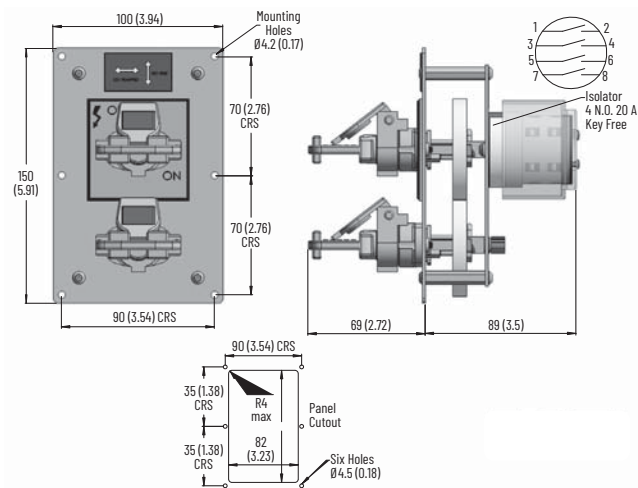


Figure 132 - MRXE10 and MRXE11 [mm (in.)]

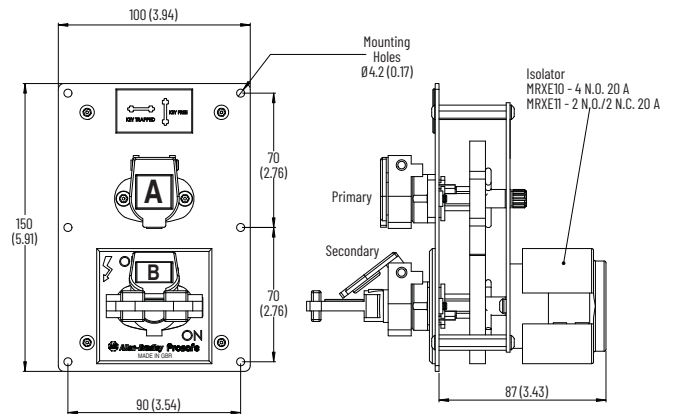


Figure 131 - MRSE20 [mm (in.)]

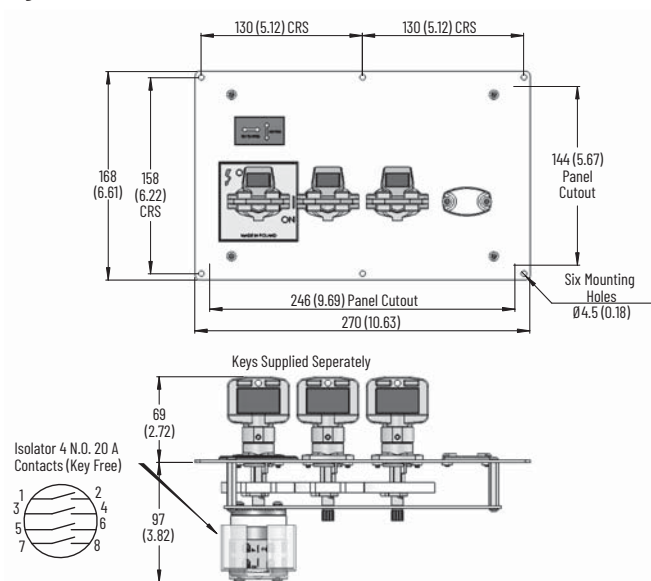


Figure 133 - MRXE30 [mm (in.)]

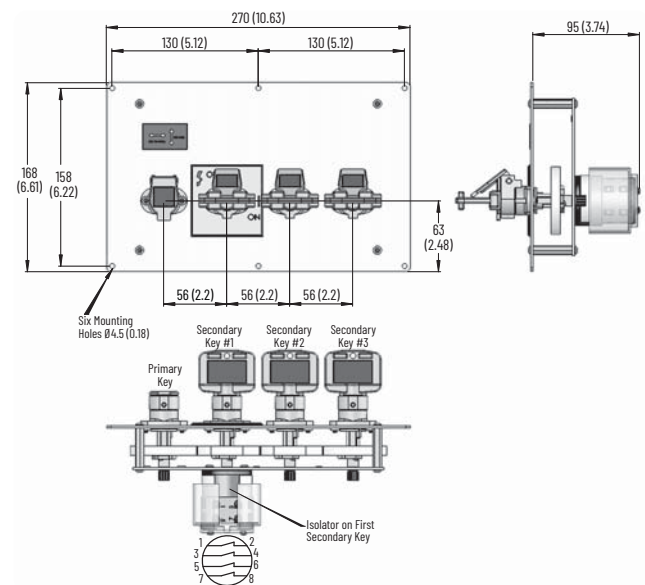


Figure 134 - RKSE10 and RKSE11 [mm (in.)]

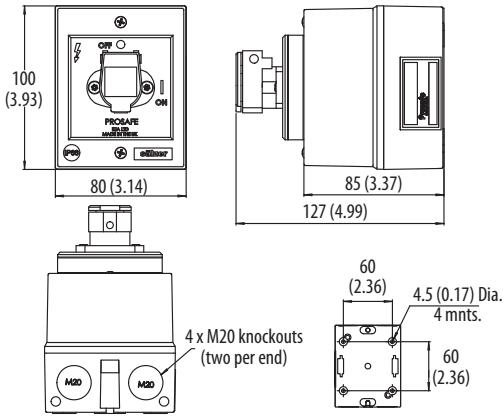


Figure 135 - RKSE12 and RKSE13 [mm (in.)]

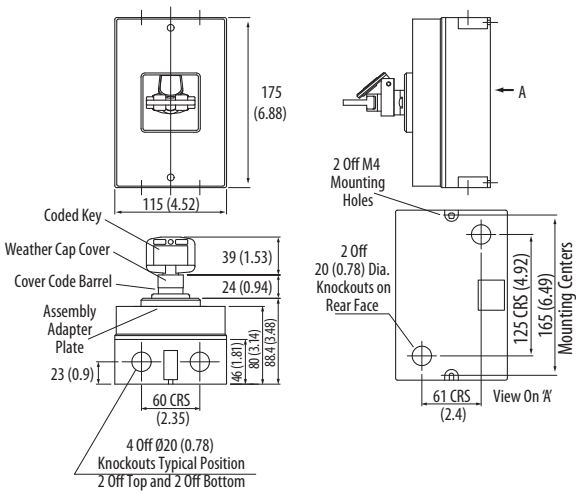


Figure 136 - RKSE14 [mm (in.)]

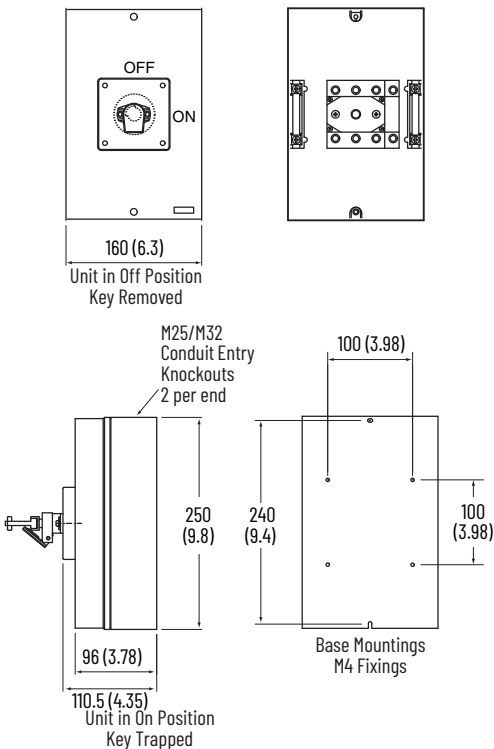


Figure 137 - RPSE10 and RPSE11 [mm (in.)]

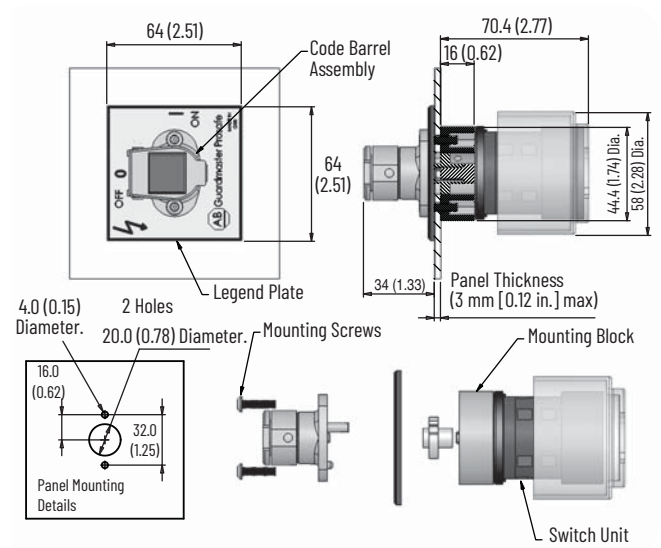


Figure 138 - RPSE12, 13, 14, and 20 [mm (in.)]

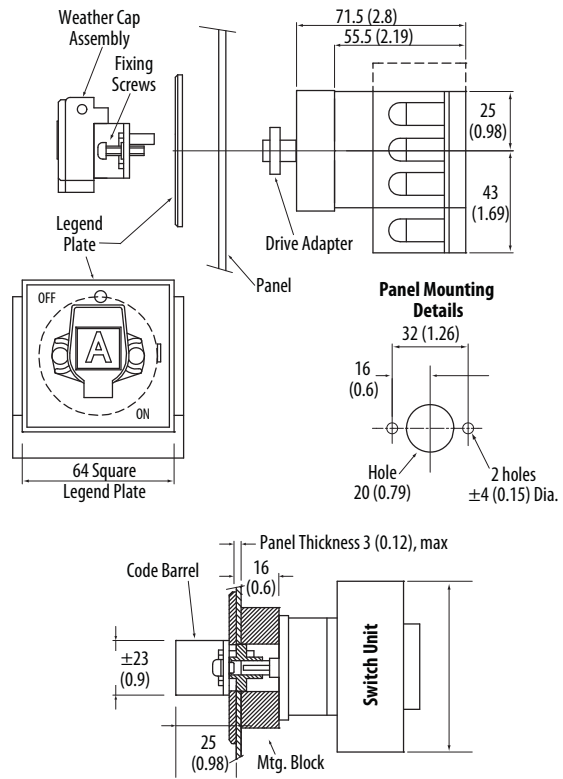


Figure 139 - RPSE16 [mm (in.)]

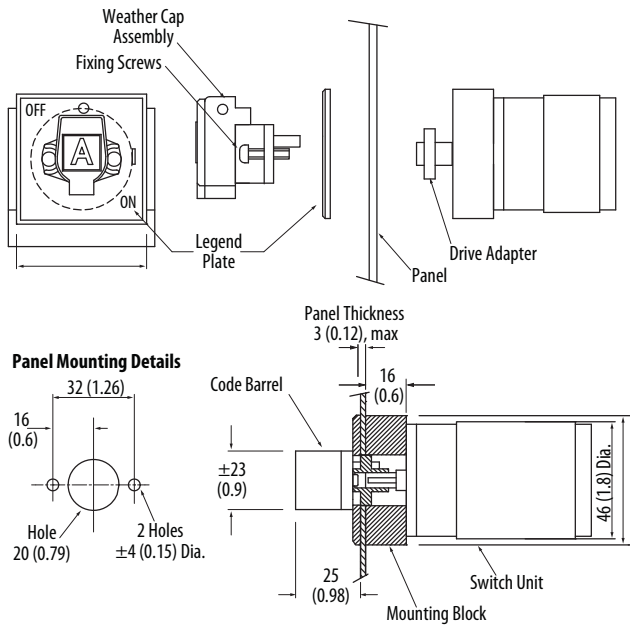
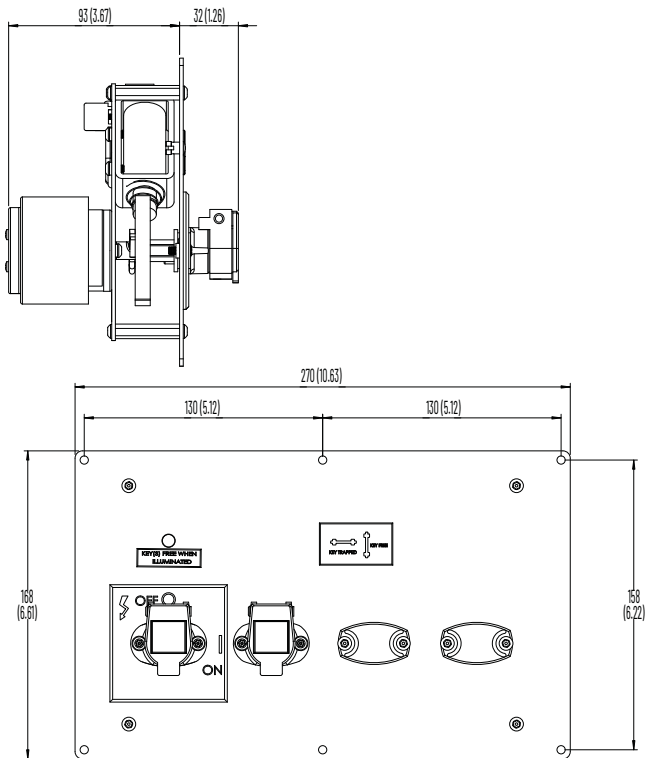


Figure 140 - Multi Key [mm (in.)]



## Switch Operation

Figure 141 - Dual Key (Two Keys Out)

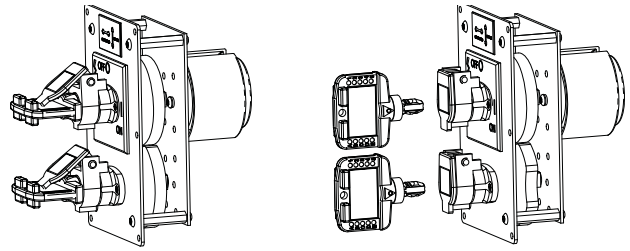


Figure 142 - Dual Key (One Key In/One Key Out)

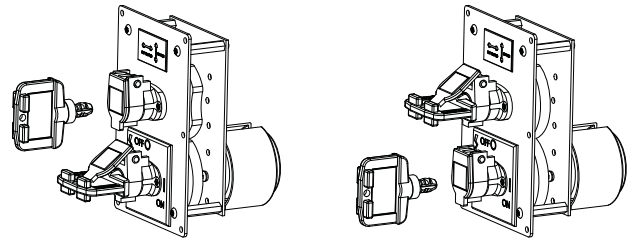


Figure 143 - Multi-key (Four Keys Out)

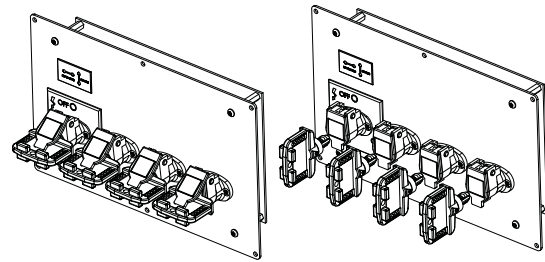
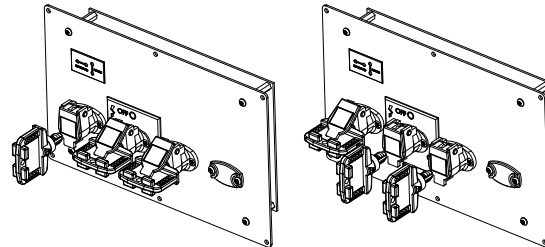
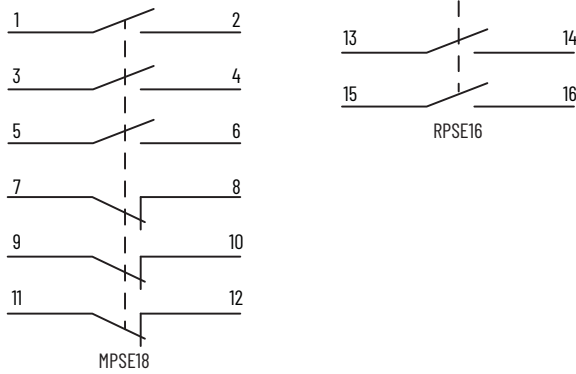
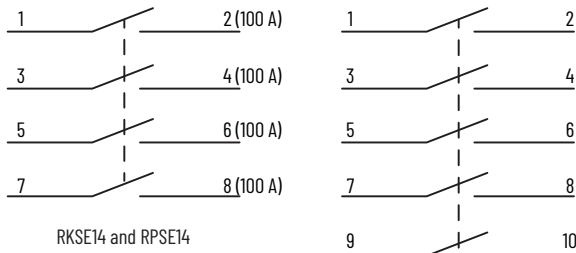
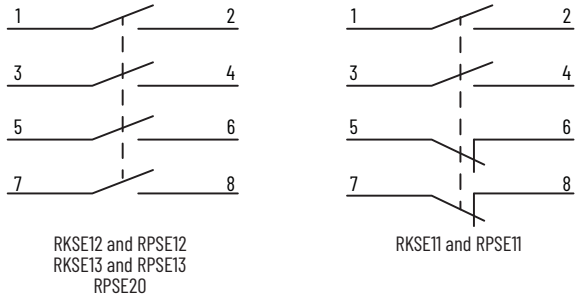


Figure 144 - Multi-key (One Key In/Two Keys Out)



## Typical Wiring Diagrams

Figure 145 - Diagrams Shown with Key Free



## Solenoid Release Units

The trapped key solenoid release units have the following features:

- Direct-drive operation—positively opens contacts
- Integral solenoid monitoring
- Key trapped until release signal is applied
- Green key free status indicator
- 316L stainless-steel construction
- 24V DC, 110V DC, 110V AC, or 230V AC solenoid options
- Weatherproof stainless-steel dust cap as standard
- UL and CSA approval on switches
- Single or multiple key units available (contact your local Allen-Bradley distributor or Rockwell Automation sales office)
- Replaceable code barrel assembly



## Specifications

Attribute	Solenoid Release Units
Standards Classification (Safety)	EN ISO 14119 and GS-ET-31, and can be used in safety application up to category 3, PLd in accordance with EN ISO 13849-1, and in the application area of EN 60204-1.
Functional Safety Data	PFHD = 1.00E-7 (probability of dangerous failure per hr); T1 = 20 (Proof test interval)
Certifications	CE Marked for all applicable directive, UKCA Marked for all applicable regulations, TÜV Certified <a href="http://rok.auto/certifications">rok.auto/certifications</a>
Solenoid rating	24V DC (11 W), 110V DC (11 W), 110V AC (17VA), and 230V AC (17VA)
Solenoid power	<ul style="list-style-type: none"> <li>• DC Types: 6.5 W continuous</li> <li>• AC Types: 6V A continuous</li> </ul>
Electrical characteristics	See <a href="#">Specifications on page 126</a> .
Mounting	Any position
Shear force to key, max	15.1 kN (3394.62 lbf)
Torque to key, max [N•m (lb•in)]	14 (10.33)
Cable type	0.75 mm <sup>2</sup> (18 AWG) 2-wire PVC jacket QD
Operating temperature [°C (°F)]	0...40 (32...104)
Relative humidity	95%
Material	<ul style="list-style-type: none"> <li>• Trapped key components: 316L stainless steel</li> <li>• Faceplate: 316L stainless steel</li> <li>• Optional box: ABS plastic or stainless steel</li> </ul>
Mechanical life	200,000 operations

## Product Selection

Type	Solenoid Voltage	Contacts	Trapped Key Condition	Current	Cat. No.	
					Standard	Engraved
Single key out	24V DC	2 N.O. and 2 N.C.	Primary key is trapped (ordered separately) Key 1 operates the isolator, and is trapped by the solenoid in the ON position. When the solenoid is powered, key 1 can be turned 90 CCW, the isolator is now locked in the OFF position Key 1 is now free	20 A	440T-MSRUE11x <sup>(1)</sup>	440T-MSRUS11x <sup>(1)</sup>
		4 N.O.			440T-MSRUE10x <sup>(1)</sup>	440T-MSRUS10x <sup>(1)</sup>
	110V AC	2 N.O. and 2 N.C.		20 A	440T-MSRUE12x <sup>(1)</sup>	440T-MSRUS12x <sup>(1)</sup>
		4 N.O.			440T-MSRUE22x <sup>(1)</sup>	440T-MSRUS22x <sup>(1)</sup>
	230V AC	2 N.O. and 2 N.C.		20 A	440T-MSRUE20x <sup>(1)</sup>	440T-MSRUS20x <sup>(1)</sup>
		4 N.O.			440T-MSRUE23x <sup>(1)</sup>	440T-MSRUS23x <sup>(1)</sup>
	110V DC	2 N.O. and 2 N.C.		20 A	440T-MSRUE33x <sup>(1)</sup>	440T-MSRUS33x <sup>(1)</sup>
					440T-MSRUE30x <sup>(1)</sup>	440T-MSRUS30x <sup>(1)</sup>
		4 N.O.		32 A	440T-MSRUE34x <sup>(1)</sup>	440T-MSRUS34x <sup>(1)</sup>
				20 A	440T-MSRUE44x <sup>(1)</sup>	440T-MSRUS44x <sup>(1)</sup>
	3 N.O. and 3N.C.	20 A		440T-MSRUE40x <sup>(1)</sup>	440T-MSRUS40x <sup>(1)</sup>	
		440T-MSRUE46x <sup>(1)</sup>		440T-MSRUS46x <sup>(1)</sup>		
Dual key out	24V DC	4 N.O.	Primary keys are trapped (ordered separately) Key 1 operates the isolator, and is locked by the 24V DC Solenoid in the ON position. When the solenoid is powered, key 1 can be turned 90 CCW, the isolator is now locked in the OFF position Depending on the version, keys 2,3, and 4 can now turned 90 CCW in sequence, and all keys removed Keys are now free	20 A	440T-MS2097Dxx <sup>(1)</sup>	-
		2 N.O. and 2 N.C.			440T-MS2097Axx <sup>(1)</sup>	-
		4 N.O.		32 A	440T-MS2097Gxx <sup>(1)</sup>	-
		4 N.O.		63 A	440T-MS2097Jxx <sup>(1)</sup>	-
Triple key out	24V DC	4 N.O.	Primary keys are trapped (ordered separately) Key 1 operates the isolator, and is locked by the 24V DC Solenoid in the ON position. When the solenoid is powered, key 1 can be turned 90 CCW, the isolator is now locked in the OFF position Depending on the version, keys 2,3, and 4 can now turned 90 CCW in sequence, and all keys removed Keys are now free	20 A	440T-MS3417Dxxx <sup>(1)</sup>	-
		2 N.O. and 2 N.C.			440T-MS3417Axxx <sup>(1)</sup>	-
		4 N.O.		32 A	440T-MS3417Gxxx <sup>(1)</sup>	-
		4 N.O.		63 A	440T-MS3417Jxxx <sup>(1)</sup>	-
Quad key out	24V DC	4 N.O.	Primary keys are trapped (ordered separately) Key 1 operates the isolator, and is locked by the 24V DC Solenoid in the ON position. When the solenoid is powered, key 1 can be turned 90 CCW, the isolator is now locked in the OFF position Depending on the version, keys 2,3, and 4 can now turned 90 CCW in sequence, and all keys removed Keys are now free	20 A	440T-MS3418Dxxxx <sup>(1)</sup>	-
		2 N.O. and 2 N.C.			440T-MS3418Axxxx <sup>(1)</sup>	-
		4 N.O.		32 A	440T-MS3418Gxxxx <sup>(1)</sup>	-
		4 N.O.		63 A	440T-MS3418Jxxxx <sup>(1)</sup>	-

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

## Accessories

Description	Additional Information	Cat. No.
Stainless-steel key	See <a href="#">Accessories on page 166</a> .	440T-AKEYE10x <sup>(1)</sup>
Stainless-steel replacement code barrel for products other than 100 A RPS/RKS units		440T-ASCBE14x <sup>(1)</sup>
Stainless-steel weatherproof replacement dust cap		440T-ASFCT10x <sup>(1)</sup>
Optional IP65 plastic enclosure	For use with 20 A units	440T-AIPB10
Optional IP65 plastic enclosure	For use with 32 A units	440T-AIPB22

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

## Approximate Dimensions

Figure 146 - Single Key [mm (in.)]

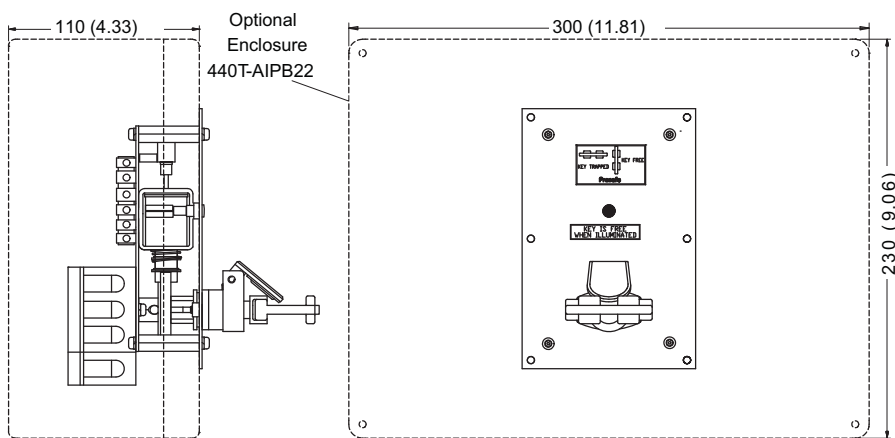
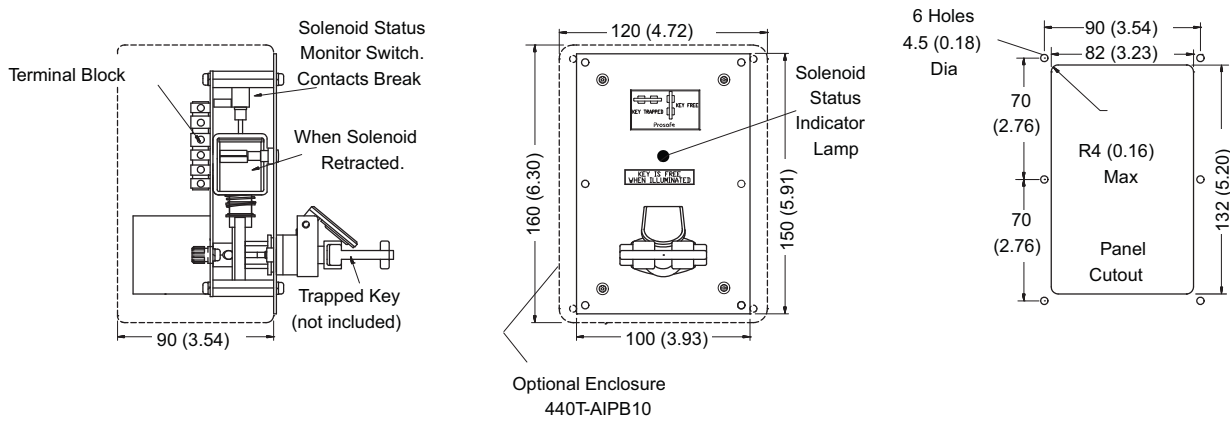
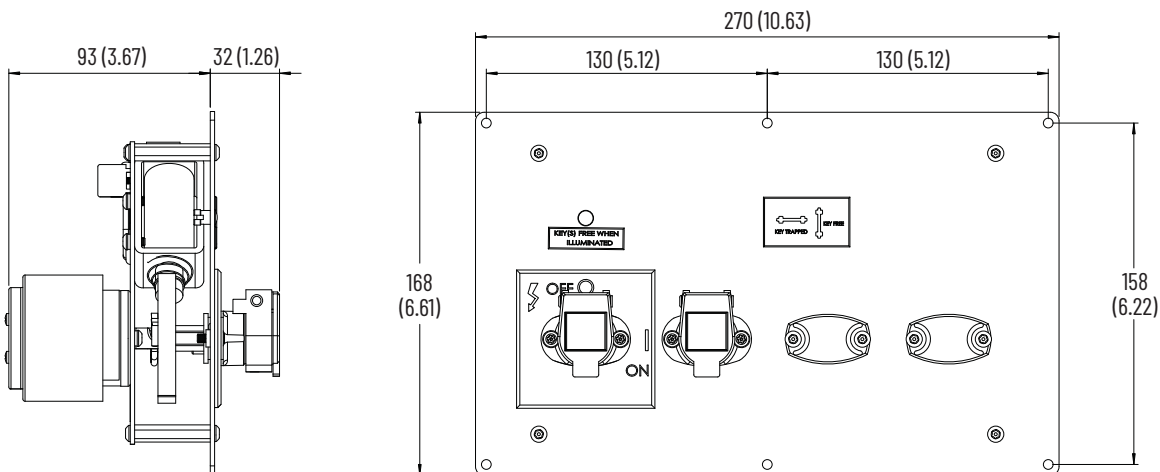


Figure 147 - Multi-key [mm (in.)]



## Typical Wiring Diagrams

Figure 148 - Solenoid Release Unit Wiring

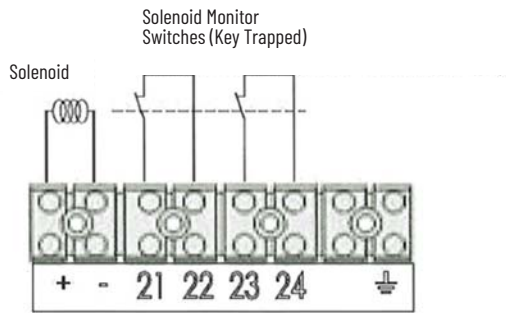
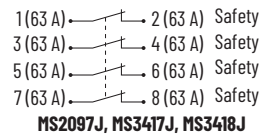
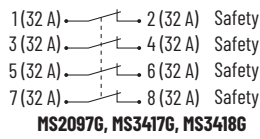
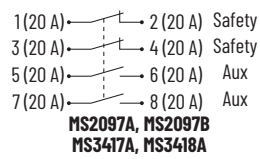
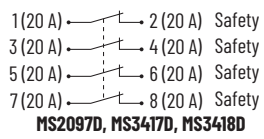


Figure 149 - Contacts



## Electronic Timed-delay Units

The trapped keyswitch with electronic timed-delay units have the following features:

- Timed-delay output up to 30 minutes
- Single key or dual key
- 316L stainless-steel keys
- Category 1 Stop
- Replaceable code barrel assembly



## Specifications

Attribute	Electronic Timed-delay Units
Standards	IEC60204-1, IEC60947-5-1
Certifications	CE Marked for all applicable EU directives, UKCA Marked for all applicable regulations <a href="http://rok.auto/certifications">rok.auto/certifications</a>
Solenoid voltage	24V DC, 110V AC, 230V AC
Shear force to key, max	15.1 kN (3394.62 lbf)
Torque to key, max [N•m (lb•in)]	14 (10.33)
Operating temperature [°C (°F)]	0...40 (32...104)
Relative humidity	95%
Material	<ul style="list-style-type: none"> <li>• Trapped key components: 316L stainless steel</li> <li>• Faceplate: 316L stainless steel</li> </ul>
Mounting	Tamper resistant screws
Mechanical life	200,000 operations
Time delay	0.1 second...30 minutes

## Product Selection

Type	Solenoid Voltage	Contact Set 1	Contact Set 2	Cat. No. (1)
Single key out panel mounted	24V DC	3 N.O. 40 A	1 N.O. 20 A	440T-MSTUE10x <sup>(2)</sup>
		2 N.O. 20 A	1 N.O. 20 A	440T-MSTUE11x <sup>(2)</sup>
	110V AC	3 N.O. 40 A	1 N.O. 20 A	440T-MSTUE20x <sup>(2)</sup>
		2 N.O. 20 A	1 N.O. 20 A	440T-MSTUE22x <sup>(2)</sup>
	230V AC	3 N.O. 40 A	1 N.O. 20 A	440T-MDTUE30x <sup>(2)</sup>
		2 N.O. 20 A	1 N.O. 20 A	440T-MSTUE33x <sup>(2)</sup>
Dual key out panel mounted	24V DC	3 N.O. 40 A	1 N.O. 20 A	440T-MDTUE10xx <sup>(2)</sup>
		2 N.O. 20 A	1 N.O. 20 A	440T-MDTUE11xx <sup>(2)</sup>
	110V AC	3 N.O. 40 A	1 N.O. 20 A	440T-MDTUE20xx <sup>(2)</sup>
		2 N.O. 20 A	1 N.O. 20 A	440T-MDTUE22xx <sup>(2)</sup>
	230V AC	3 N.O. 40 A	1 N.O. 20 A	440T-MDTUE30xx <sup>(2)</sup>
		2 N.O. 20 A	1 N.O. 20 A	440T-MDTUE33xx <sup>(2)</sup>

- (1) See Prosafe Electronic Time Delay Unit Installation Instructions, publication [440T-IN016](#) for safety relay connection and switch setting details.  
 (2) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

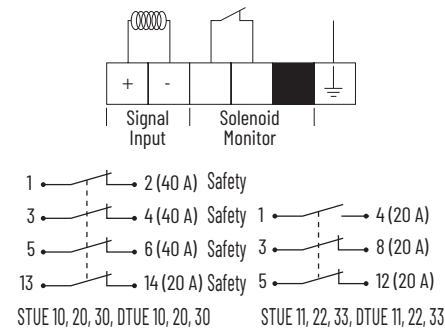
## Accessories

Description	Additional Information	Cat. No.
Stainless-steel key	See <a href="#">Accessories on page 166</a> .	440T-AKEYE10x <sup>(1)</sup>
Stainless-steel replacement code barrel for products other than 100 A RPS/RKS units		440T-ASCBE14x <sup>(1)</sup>
Stainless-steel weatherproof replacement dust cap		440T-ASFC10x <sup>(1)</sup>

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

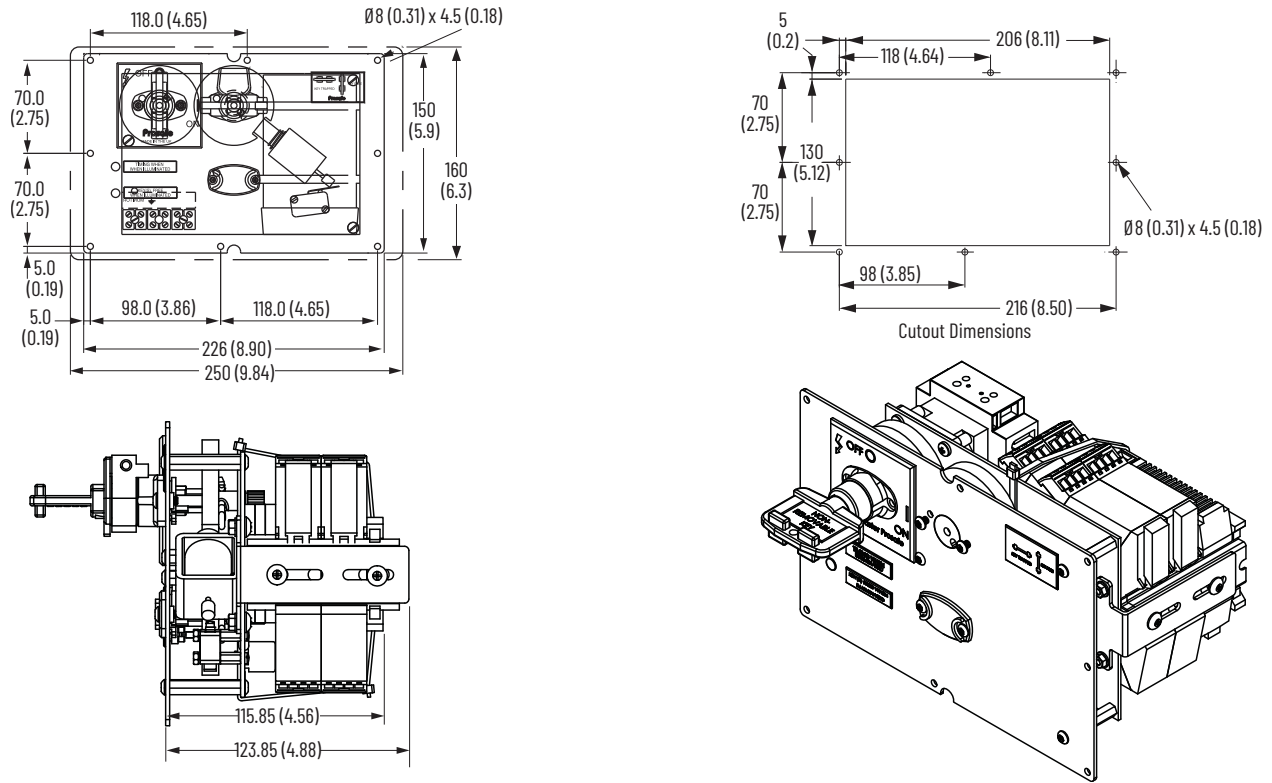
## Typical Wiring Diagram

Figure 150 - Wiring (Shown with Power On)



## Approximate Dimensions

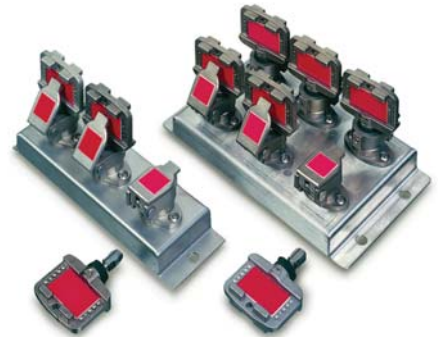
Figure 151 - Timed-delay Unit Dimensions [mm (in.)]



## Key Exchange Units

The trapped key interlock exchange unit switches have the following features:

- A range of standard units in various combinations
- 316L stainless-steel construction
- Primary keys in release secondary keys simultaneously on units up to six ways
- Weatherproof stainless-steel dust cap as standard
- Replaceable code barrel assembly



## Specifications

Attribute	Key Exchange Units
Standards Classification (Safety)	EN ISO 14119 and GS-ET-31, and can be used in safety application up to category 3, PLd in accordance with EN ISO 13849-1, and in the application area of EN 60204-1.
Functional Safety Data	PFHD = 1.00E-7 (probability of dangerous failure per hr); T1 = 20 (Proof test interval)
Certifications	CE Marked for all applicable EU directives, UKCA Marked for all applicable regulations, TÜV Certified <a href="http://rok.auto/certifications">rok.auto/certifications</a>
Operating temperature [ <sup>o</sup> C (°F)]	-40...+80 (-40...+176)
Relative humidity	95%
Mechanical life	200,000 operations
Shear force to key, max	15.1 kN (3394.62 lbf)
Torque to key, max [N•m (lb•in)]	14 (10.33)
Material	316L stainless steel

## Optional Key Exchange Cabinets

Type	Number of Keys	Length [mm (in)]	Width [mm (in)]	Depth [mm (in)]	Cat. No.
Painted mild steel	7...11 way (max)	400 (15.7)	300 (11.8)	200 (7.87)	440T-AIPB30
	12...15 way (max)	400 (15.7)	400 (15.7)	210 (8.26)	440T-AIPB33
	16...25 way (max)	600 (23.6)	600 (23.6)	210 (8.26)	440T-AIPB34
Stainless steel	12...15 way (max)	400 (15.7)	400 (15.7)	210 (8.26)	440T-AIPB40
	16...25 way (max)	600 (23.6)	600 (23.6)	210 (8.26)	440T-AIPB44

## Product Selection

Number of Keys	Keys In and Out	Cat. No. <sup>(1)</sup>
2 way	1 key in 1 key out	440T-MKEXE10
3 way	1 key in 2 key out	440T-MKEXE11
4 way	1 key in 3 key out	440T-MKEXE12
5 way	1 key in 4 key out	440T-MKEXE13
6 way	1 key in 5 key out	440T-MKEXE14
4 way	2 key in 2 key out	440T-MKEXE15
5 way	2 key in 3 key out	440T-MKEXE16
6 way	2 key in 4 key out	440T-MKEXE17
6 way	3 key in 3 key out	440T-MKEXE18
7 way	1 key in 6 key out	440T-MKEXE19
8 way	1 key in 7 key out	440T-MKEXE20
9 way	1 key in 8 key out	440T-MKEXE22
10 way	1 key in 9 key out	440T-MKEXE23
11 way	1 key in 10 key out	440T-MKEXE24
12 way	1 key in 11 key out	440T-MKEXE25

Number of Keys	Keys In and Out	Cat. No. <sup>(1)</sup>
13 way	1 key in 12 key out	440T-MKEXE26
14 way	1 key in 13 key out	440T-MKEXE27
15 way	1 key in 14 key out	440T-MKEXE28
16 way	1 key in 15 key out	440T-MKEXE29
17 way	1 key in 16 key out	440T-MKEXE30
18 way	1 key in 17 key out	440T-MKEXE33
19 way	1 key in 18 key out	440T-MKEXE34
20 way	1 key in 19 key out	440T-MKEXE35
21 way	1 key in 20 key out	440T-MKEXE36
22 way	1 key in 21 key out	440T-MKEXE37
23 way	1 key in 22 key out	440T-MKEXE38
24 way	1 key in 23 key out	440T-MKEXE39
25 way	1 key in 24 key out	440T-MKEXE40

<sup>(1)</sup> Specify the codes individually for each primary key-in (key not included) and for each secondary key (included). See [Key Coding on page 124](#) for code selection.

## Accessories

Description	Additional Information	Cat. No.
Stainless-steel key	See <a href="#">Accessories on page 166</a> .	440T-AKEYE10x <sup>(1)</sup>
Stainless-steel replacement code barrel for products other than 100 A RPS/RKS units		440T-ASCBE14x <sup>(1)</sup>
Stainless-steel weatherproof replacement dust cap		440T-ASFC10x <sup>(1)</sup>

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

## Approximate Dimensions

Figure 152 - 2- or 3-way Key Exchange Unit [mm (in.)]

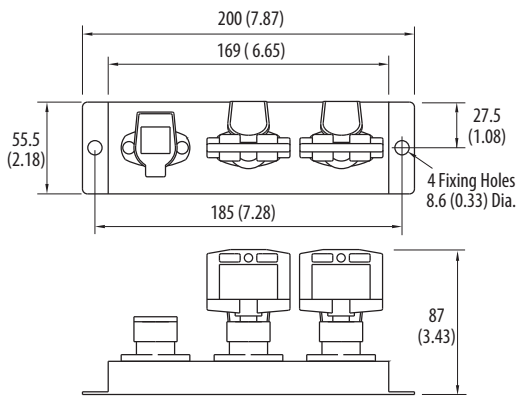


Figure 153 - 4-, 5-, or 6-way Key Exchange Unit [mm (in.)]

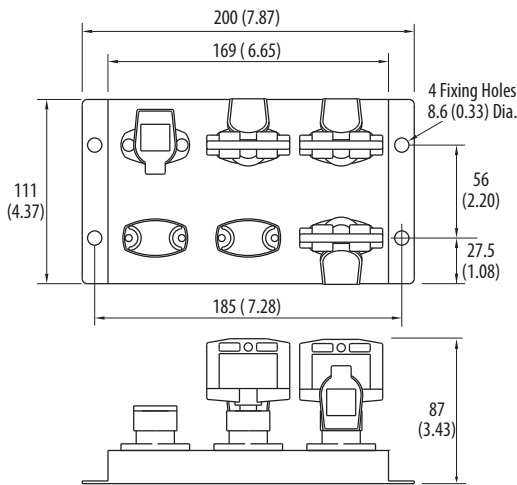


Figure 154 - 7-...11-way Units [mm (in.)]

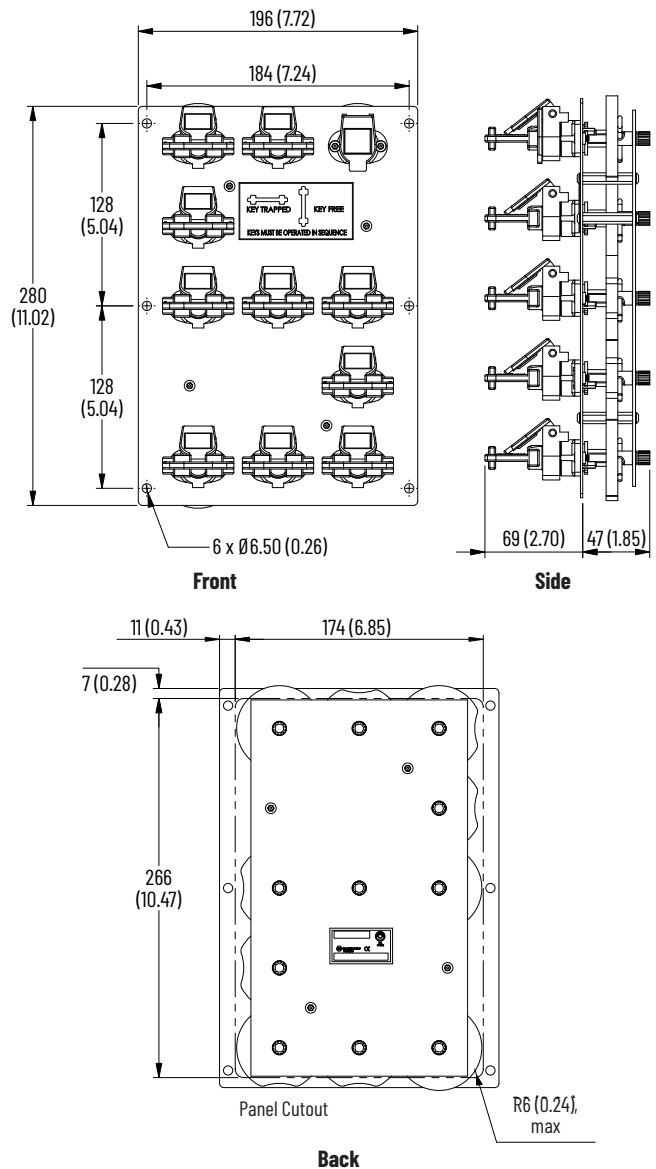


Figure 155 - 12-...15-way Units [mm (in.)]

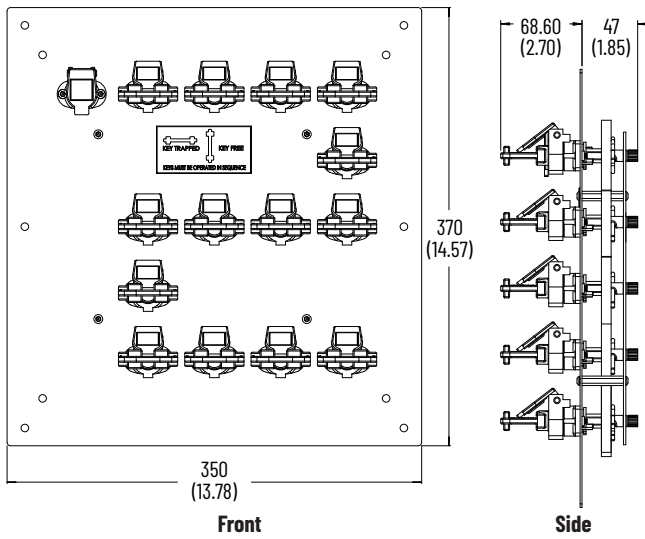


Figure 156 - 16-...25-way Units [mm (in.)]

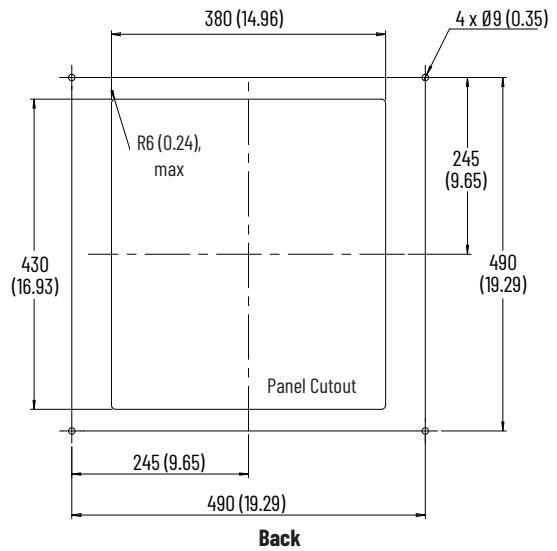
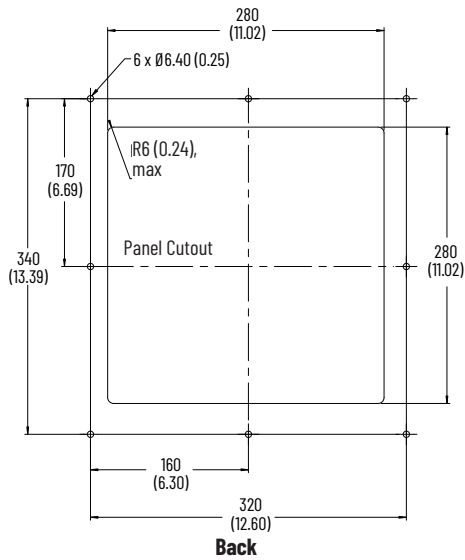
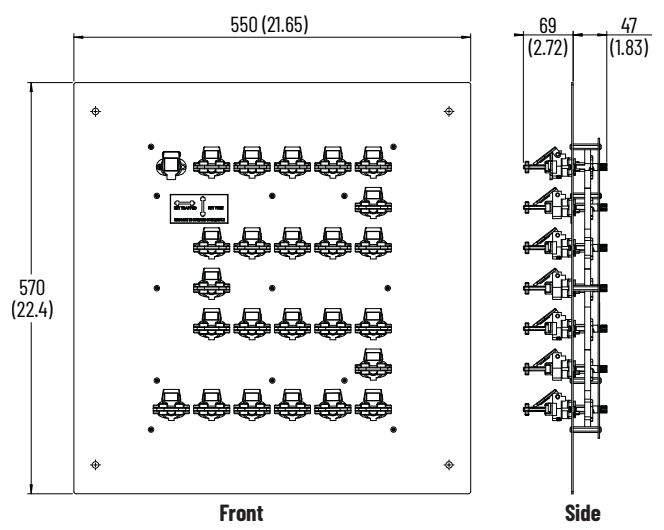
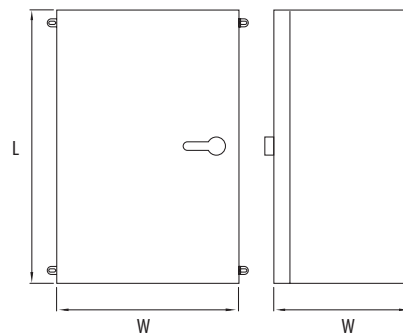


Figure 157 - Key Exchange Cabinets (Painted Mild Steel or Stainless Steel)



## Bolt Interlocks

The trapped key bolt interlock switches have the following features:

- 316L stainless-steel construction
- Single or dual key units
- Various extensions of bolt
- Direct-drive push/pull operation
- Replaceable code barrel assembly
- Fitted with tamper resistant screws
- Weatherproof stainless-steel dust cap as standard



## Specifications

**Table 76 - Mechanical Bolt Interlock Specifications**

Attribute	Value
Standards Classification (Safety)	EN ISO 14119 and GS-ET-31, and can be used in safety application up to category 3, PLd in accordance with EN ISO 13849-1, and in the application area of EN 60204-1.
Functional Safety Data	PFHD = 1.00E-7 (probability of dangerous failure per hr); T1 = 20 (Proof test interval)
Certifications	CE Marked for all applicable EU directives, UKCA Marked for all applicable regulations, TÜV Certified <a href="http://rok.auto/certifications">rok.auto/certifications</a>
Operating temperature [°C (°F)]	-40...+80 (-40...+176)
Relative humidity	95%
Mechanical life	200,000 operations
Shear force to key, max	15.1 kN (3394.62 lbf)
Torque to key, max [N•m (lb•in)]	14 (10.33)
Material	Faceplate: 316L stainless steel
Mounting	SBL <ul style="list-style-type: none"> <li>• 2 x M5 counter-bored from top</li> <li>• 2 x M5 from underside with M5 nuts</li> </ul> DBL <ul style="list-style-type: none"> <li>• 4 x M5 counter-bored from top</li> <li>• 4 x M5 from underside with M5 nuts</li> </ul>
Bolt diameter [mm (in.)]	15 (0.59)

**Table 77 - Electrical/Solenoid Bolt Interlock Specifications**

Attribute	Value
Standards Classification (Safety)	EN ISO 14119 and GS-ET-31, and can be used in safety application up to category 3, PLd in accordance with EN ISO 13849-1, and in the application area of EN 60204-1.
Functional Safety Data	PFHD = 1.00E-7 (probability of dangerous failure per hr); T1 = 20 (Proof test interval)
Certifications	CE Marked for all applicable EU directives, UKCA Marked for all applicable regulations, TÜV Certified <a href="http://rok.auto/certifications">rok.auto/certifications</a>
Safety contacts	2 N.C. positive break
Designation/utilization category	A300/AC-15 (Ue/Ie) 240V/3 A, 120V/6 A N300/DC-13 (Ue/Ie) 250V/1.1 A, 125V/2.2 A
Thermal current	10 A
Current, min	5V 5 mA DC
Auxiliary contacts	1 N.O.
Ingress protection rating	IP67
Shear force to key, max	15.1 kN (3394.62 lbf)
Torque to key, max [N•m (lb•in)]	14 (10.33)
Operating temperature [°C (°F)]	-40...+80 (-40...+176)
Mechanical life	200,000 operations
Electrical life	Dependent on load
Torque settings, max [N•m (lb•in)]	<ul style="list-style-type: none"> <li>• Lid screws: 0.55 (4.87)</li> <li>• Terminal screws: 1.0 (8.85)</li> </ul>

## Operation

Figure 158 - Single Key

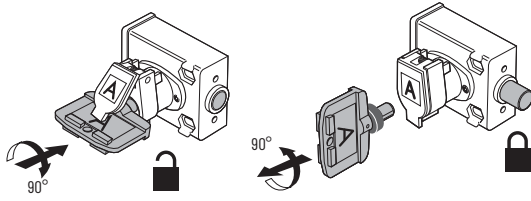


Figure 159 - Dual Key

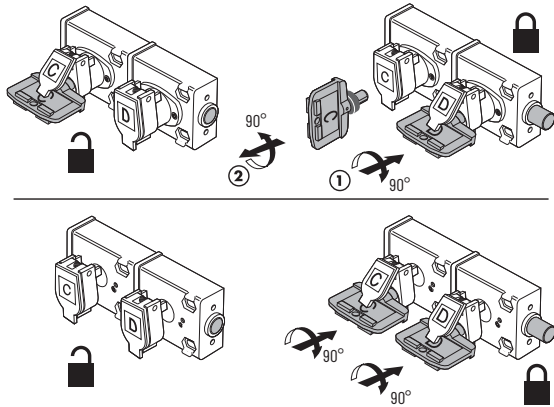


Figure 160 - Triple Key

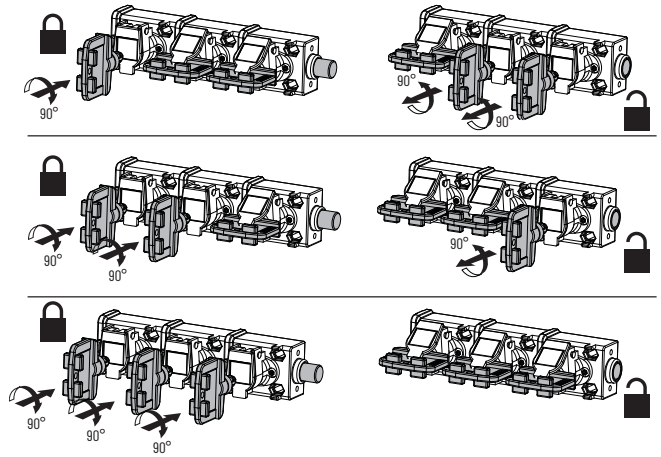
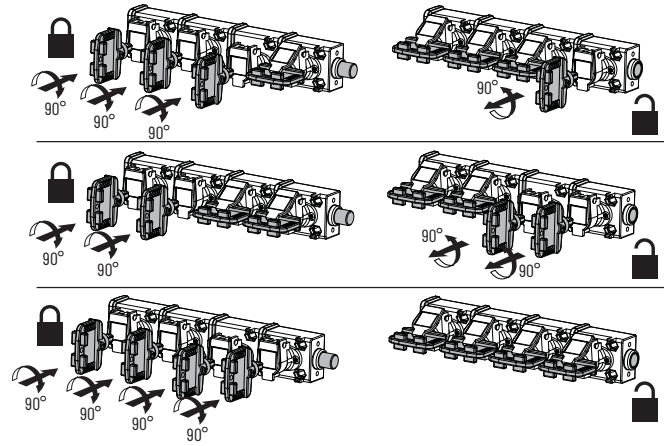


Figure 161 - Quad Key



## Product Selection

Table 78 - Mechanical Bolt Interlock Product Selection

Type	Keys In / Out	Trapped Key Condition	Bolt Retracted [mm (in.)]	Bolt Extended [mm (in.)]	Cat. No.	
					Standard	Engraved
Single key	1 key in	Bolt projected (guard is secured) Primary key 1 is free (ordered separately) Insert primary key 1 and rotate 90° CW to retract bolt Primary key 1 is now trapped (guard can be accessed)	0	14 (0.55)	440T-MSBLE10x <sup>(1)</sup>	440T-MSBLS10x <sup>(1)</sup>
			3 (0.11)	17 (0.66)	440T-MSBLE11x <sup>(1)</sup>	440T-MSBLS11x <sup>(1)</sup>
			6 (0.23)	20 (0.78)	440T-MSBLE12x <sup>(1)</sup>	440T-MSBLS12x <sup>(1)</sup>
			13 (0.51)	27 (1.06)	440T-MSBLE13x <sup>(1)</sup>	440T-MSBLS13x <sup>(1)</sup>
		Bolt projected (guard is secured) Primary key 1 is free (ordered separately) Insert primary key 1 and rotate 90° CW to extend bolt Primary key 1 is now trapped (guard is secure)	0	14 (0.55)	440T-MSBLE33x <sup>(1)</sup>	440T-MSBLS33x <sup>(1)</sup>
			3 (0.11)	17 (0.66)	440T-MSBLE34x <sup>(1)</sup>	440T-MSBLS34x <sup>(1)</sup>
			6 (0.23)	20 (0.78)	440T-MSBLE35x <sup>(1)</sup>	440T-MSBLS35x <sup>(1)</sup>
			13 (0.51)	27 (1.06)	440T-MSBLE36x <sup>(1)</sup>	440T-MSBLS36x <sup>(1)</sup>
Dual key	2 keys in	Bolt projected (guard is secured) Primary keys are free (ordered separately) Insert primary key 1 into the lock, then insert primary key 2 Rotate both keys 90° CW to retract bolt Primary keys are now trapped (guard can be accessed)	0	14 (0.55)	440T-MDBLE10x <sup>(1)</sup>	440T-MDBLS10x <sup>(1)</sup>
			3 (0.11)	17 (0.66)	440T-MDBLE11x <sup>(1)</sup>	440T-MDBLS11x <sup>(1)</sup>
			6 (0.23)	20 (0.78)	440T-MDBLE12x <sup>(1)</sup>	440T-MDBLS12x <sup>(1)</sup>
			13 (0.51)	27 (1.06)	440T-MDBLE13x <sup>(1)</sup>	440T-MDBLS13x <sup>(1)</sup>
	1 key in / 1 key out	Bolt projected (guard is secured) Primary key 1 free (ordered separately) Secondary key 1 trapped (included w/ product) Insert primary key 1 and rotate 90° CW Rotate secondary key 90° CCW to retract bolt Primary key 1 is now trapped (guard can be accessed) Secondary key 1 is free (personal key)	0	14 (0.55)	440T-MDBLE14xy <sup>(1)(2)</sup>	440T-MDBLS14xy <sup>(1)(2)</sup>
			3 (0.11)	17 (0.66)	440T-MDBLE15xy <sup>(1)(2)</sup>	440T-MDBLS15xy <sup>(1)(2)</sup>
			6 (0.23)	20 (0.78)	440T-MDBLE16xy <sup>(1)(2)</sup>	440T-MDBLS16xy <sup>(1)(2)</sup>
			13 (0.51)	27 (1.06)	440T-MDBLE17xy <sup>(1)(2)</sup>	440T-MDBLS17xy <sup>(1)(2)</sup>
	1 key in / 1 key out	Bolt projected (guard is secured) Primary key 1 free (ordered separately) Secondary key 1 trapped (included w/ product) Insert primary key 1 and rotate 90° CW Rotate secondary key 1 to 90° CCW to retract bolt Primary key 1 is now trapped (guard can be accessed) Secondary key 1 ejects free from the lock (personal key)	0	14 (0.55)	440T-MDBLJ14xy <sup>(1)(2)</sup>	440T-MDBLT14xy <sup>(1)(2)</sup>
			3 (0.11)	17 (0.66)	440T-MDBLJ15xy <sup>(1)(2)</sup>	440T-MDBLT15xy <sup>(1)(2)</sup>
			6 (0.23)	20 (0.78)	440T-MDBLJ16xy <sup>(1)(2)</sup>	440T-MDBLT16xy <sup>(1)(2)</sup>
			13 (0.51)	20 (0.78)	440T-MDBLJ17xy <sup>(1)(2)</sup>	440T-MDBLT17xy <sup>(1)(2)</sup>
Triple key	3 keys in	Bolt projected (guard is secured) Primary keys are free (ordered separately) Insert primary key 1 into the lock, then key 2, then key 3 Rotate the 3 primary keys 90° CW to retract the bolt Primary keys are now trapped (guard can be accessed)	0	14 (0.55)	440T-MTBLE10xxx <sup>(1)</sup>	440T-MTBLS10xxx <sup>(1)</sup>
			3 (0.11)	17 (0.66)	440T-MTBLE11xxx <sup>(1)</sup>	440T-MTBLS11xxx <sup>(1)</sup>
			6 (0.23)	20 (0.78)	440T-MTBLE12xxx <sup>(1)</sup>	440T-MTBLS12xxx <sup>(1)</sup>
			13 (0.51)	27 (1.06)	440T-MTBLE13xxx <sup>(1)</sup>	440T-MTBLS13xxx <sup>(1)</sup>
	2 keys in / 1 key out	Bolt projected (guard is secured) Primary key 1 and primary key 2 are free (ordered separately) Secondary key 1 is trapped Insert primary key 1 into the lock, then key 2 Rotate primary key 1 and key 2 to 90° CW Rotate secondary key 1 to 90° CCW to retract bolt Primary key 1 and key 2 are now trapped (guard can be accessed) Secondary key 1 is free (personal key)	0	14 (0.55)	440T-MTBLE14xxy <sup>(1)(2)</sup>	440T-MTBLS14xxy <sup>(1)(2)</sup>
			3 (0.11)	17 (0.66)	440T-MTBLE15xxy <sup>(1)(2)</sup>	440T-MTBLS15xxy <sup>(1)(2)</sup>
			6 (0.23)	20 (0.78)	440T-MTBLE16xxy <sup>(1)(2)</sup>	440T-MTBLS16xxy <sup>(1)(2)</sup>
			13 (0.51)	27 (1.06)	440T-MTBLE17xxy <sup>(1)(2)</sup>	440T-MTBLS17xxy <sup>(1)(2)</sup>
	1 key in / 2 key out	Bolt projected (guard is secured) Primary key 1 is free (ordered separately) Secondary key 1 and key 2 are trapped (included w/ product) Insert primary key 1 into the lock and rotate 90° CW Rotate secondary key 1 and key 2 to 90° CCW to retract bolt Primary key 1 is now trapped (guard can be accessed) Secondary key 1 and key 2 are free (personal keys)	0	14 (0.55)	440T-MTBLE18xxy <sup>(1)(2)</sup>	440T-MTBLS18xxy <sup>(1)(2)</sup>
			3 (0.11)	17 (0.66)	440T-MTBLE19xxy <sup>(1)(2)</sup>	440T-MTBLS19xxy <sup>(1)(2)</sup>
			6 (0.23)	20 (0.78)	440T-MTBLE20xxy <sup>(1)(2)</sup>	440T-MTBLS20xxy <sup>(1)(2)</sup>
			13 (0.51)	27 (1.06)	440T-MTBLE21xxy <sup>(1)(2)</sup>	440T-MTBLS21xxy <sup>(1)(2)</sup>

**Table 78 - Mechanical Bolt Interlock Product Selection (Continued)**

Type	Keys In / Out	Trapped Key Condition	Bolt Retracted [mm (in.)]	Bolt Extended [mm (in.)]	Cat. No.	
					Standard	Engraved
Quad key	4 keys in	Bolt projected (guard is secured) Primary keys are free (ordered separately) Insert primary key 1 into lock, then key 2, then key 3, then key 4 Rotate the 4 primary keys 90° CW to retract the bolt Primary keys are now trapped (guard can be accessed)	0	14 (0.55)	440T-MQBLE10xxx <sup>(1)</sup>	440T-MQBLS10xxx <sup>(1)</sup>
			3 (0.11)	17 (0.66)	440T-MQBLE11xxx <sup>(1)</sup>	440T-MQBLS11xxx <sup>(1)</sup>
			6 (0.23)	20 (0.78)	440T-MQBLE12xxx <sup>(1)</sup>	440T-MQBLS12xxx <sup>(1)</sup>
			13 (0.51)	27 (1.06)	440T-MQBLE13xxx <sup>(1)</sup>	440T-MQBLS13xxx <sup>(1)</sup>
	3 keys in / 1 key out	Bolt projected (guard is secured) Primary keys are free (ordered separately) Secondary key 1 is trapped (included w/ product) Insert primary key 1 into the lock, then key 2, then key 3 Rotate the 3 primary keys 90° CW Rotate secondary key 1 to 90° CCW to retract the bolt Primary keys are now trapped (guard can be accessed) Secondary key 1 is free (personal key)	0	14 (0.55)	440T-MQBLE14xxx <sup>(1)(2)</sup>	440T-MQBLS14xxx <sup>(1)(2)</sup>
			3 (0.11)	17 (0.66)	440T-MQBLE15xxx <sup>(1)(2)</sup>	440T-MQBLS15xxx <sup>(1)(2)</sup>
			6 (0.23)	20 (0.78)	440T-MQBLE16xxx <sup>(1)(2)</sup>	440T-MQBLS16xxx <sup>(1)(2)</sup>
			13 (0.51)	27 (1.06)	440T-MQBLE17xxx <sup>(1)(2)</sup>	440T-MQBLS17xxx <sup>(1)(2)</sup>

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

(2) Substitute the desired secondary code for y (key included). See [Key Coding on page 124](#) for code selection.

**Table 79 - Electrical Bolt Interlock Product Selection**

Contact Type	Type	Keys In / Out	Trapped Key Condition	Bolt Retracted [mm (in.)]	Bolt Extended [mm (in.)]	Cat. No.	
						Standard	Engraved
2 N.C. and 1 N.O. break before make	Single key	1 key in	Bolt projected (guard is secured) Primary key 1 is free (ordered separately) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Insert primary key 1 and rotate 90° CW to retract bolt 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Primary key 1 is now trapped (guard can be accessed)	0	14 (0.55)	440T-MSBSE10x <sup>(1)</sup>	440T-MSBSS10x <sup>(1)</sup>
				3 (0.11)	17 (0.66)	440T-MSBSE11x <sup>(1)</sup>	440T-MSBSS11x <sup>(1)</sup>
				6 (0.23)	20 (0.78)	440T-MSBSE12x <sup>(1)</sup>	440T-MSBSS12x <sup>(1)</sup>
			13 (0.51)	27 (1.06)	440T-MSBSE13x <sup>(1)</sup>	440T-MSBSS13x <sup>(1)</sup>	
			Bolt retracted (guard can be accessed) Primary key 1 is free (ordered separately) 2 N.C. safety contacts are in the open state 1 N.O. contact is in the closed state Insert primary key 1 and rotate 90° CCW to extend bolt 2 N.C. safety contacts are in the closed state 1 N.O. contact in the open state Key 1 is now trapped (guard is secured)	0	14 (0.55)	440T-MSBSE33x <sup>(1)</sup>	440T-MSBSS33x <sup>(1)</sup>
				3 (0.11)	17 (0.66)	440T-MSBSE34x <sup>(1)</sup>	440T-MSBSS34x <sup>(1)</sup>
	6 (0.23)	20 (0.78)		440T-MSBSE35x <sup>(1)</sup>	440T-MSBSS35x <sup>(1)</sup>		
	Dual key	2 keys in	Bolt projected (guard is secured) Primary keys are free (ordered separately) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Insert primary key 1 into the lock then insert primary key 2 Rotate both keys, 90° CW to retract bolt 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Primary keys are now trapped (guard can be accessed)	0	14 (0.55)	440T-MDBSE10xx <sup>(1)</sup>	440T-MDBSS10xx <sup>(1)</sup>
				3 (0.11)	17 (0.66)	440T-MDBSE11xx <sup>(1)</sup>	440T-MDBSS11xx <sup>(1)</sup>
				6 (0.23)	20 (0.78)	440T-MDBSE12xx <sup>(1)</sup>	440T-MDBSS12xx <sup>(1)</sup>
		1 key in / 1 key out	Bolt projected (guard is secured) Primary keys are free (ordered separately) Secondary key 1 is trapped (included w/ product) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Insert primary key 1 and rotate 90° CW Primary key 1 is now trapped Rotate secondary key 1 to 90° CCW to retract bolt 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Secondary key is free (personal key) (guard can be accessed)	0	14 (0.55)	440T-MDBSE14xy <sup>(1)(2)</sup>	440T-MDBSS14xy <sup>(1)(2)</sup>
				3 (0.11)	17 (0.66)	440T-MDBSE15xy <sup>(1)(2)</sup>	440T-MDBSS15xy <sup>(1)(2)</sup>
6 (0.23)				20 (0.78)	440T-MDBSE16xy <sup>(1)(2)</sup>	440T-MDBSS16xy <sup>(1)(2)</sup>	
13 (0.51)	27 (1.06)	440T-MDBSE17xy <sup>(1)(2)</sup>	440T-MDBSS17xy <sup>(1)(2)</sup>				

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

(2) Substitute the desired secondary code for y (key included). See [Key Coding on page 124](#) for code selection.

Table 80 - Solenoid Bolt Interlock Product Selection

Solenoid Voltage	Contact Type	Type	Keys In / Out	Trapped Key Condition	Bolt Retracted [mm (in.)]	Bolt Extended [mm (in.)]	Cat. No.	
							Standard	Engraved
24V DC	2 N.C. and 1 N.O. break before make	Single key	1 key out	Bolt projected (guard is secure) Primary key 1 is trapped (ordered separately) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Apply 24V DC to the solenoid Insert primary key 1 and rotate 90° CW to retract bolt 2 N.C. safety contacts are in the open state 1 N.O. contact is in the closed state Primary key 1 is free (personal key) (guard can be accessed)	0	14 (0.55)	440T-MSBUE10x <sup>(1)</sup>	440T-MSBUS10x <sup>(1)</sup>
				3 (0.11)	17 (0.66)	440T-MSBUE11x <sup>(1)</sup>	440T-MSBUS11x <sup>(1)</sup>	
				6 (0.23)	20 (0.78)	440T-MSBUE12x <sup>(1)</sup>	440T-MSBUS12x <sup>(1)</sup>	
				13 (0.51)	27 (1.06)	440T-MSBUE13x <sup>(1)</sup>	440T-MSBUS13x <sup>(1)</sup>	
				0	14 (0.55)	440T-MSBUE33x <sup>(1)</sup>	440T-MSBUS33x <sup>(1)</sup>	
				3 (0.11)	17 (0.66)	440T-MSBUE34x <sup>(1)</sup>	440T-MSBUS34x <sup>(1)</sup>	
		Dual key	2 keys in	Bolt retracted (guard can be accessed) Primary key 1 is trapped (ordered separately) 2 N.C. safety contacts are in the open state 1 N.O. contact is in the closed state Apply 24V DC to the solenoid Rotate primary key 1 to 90° CCW to extend bolt 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Primary key 1 is free (personal key) (guard is secured)	6 (0.23)	20 (0.78)	440T-MSBUE35x <sup>(1)</sup>	440T-MSBUS35x <sup>(1)</sup>
				13 (0.51)	27 (1.06)	440T-MSBUE36x <sup>(1)</sup>	440T-MSBUS36x <sup>(1)</sup>	
				0	14 (0.55)	440T-MDBUE10xx <sup>(1)</sup>	440T-MDBUS10xx <sup>(1)</sup>	
				3 (0.11)	17 (0.66)	440T-MDBUE11xx <sup>(1)</sup>	440T-MDBUS11xx <sup>(1)</sup>	
				6 (0.23)	20 (0.78)	440T-MDBUE12xx <sup>(1)</sup>	440T-MDBUS12xx <sup>(1)</sup>	
				13 (0.51)	27 (1.06)	440T-MDBUE13xx <sup>(1)</sup>	440T-MDBUS13xx <sup>(1)</sup>	
Dual key	1 key in / 1 key out	Bolt projected (guard is secure) Primary key 1 is free (ordered separately) Secondary key is trapped (included w/ product) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Insert primary key 1 and rotate 90° CW Primary key 1 is now trapped Apply 24V DC to the solenoid Rotate secondary key 1 to 90° CCW to retract bolt 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Secondary key is free (personal key) (guard can be accessed)	0	14 (0.55)	440T-MDBUE14xy <sup>(1)(2)</sup>	440T-MDBUS14xy <sup>(1)(2)</sup>		
		3 (0.11)	17 (0.66)	440T-MDBUE15xy <sup>(1)(2)</sup>	440T-MDBUS15xy <sup>(1)(2)</sup>			
		6 (0.23)	20 (0.78)	440T-MDBUE16xy <sup>(1)(2)</sup>	440T-MDBUS16xy <sup>(1)(2)</sup>			
		13 (0.51)	27 (1.06)	440T-MDBUE17xy <sup>(1)(2)</sup>	440T-MDBUS17xy <sup>(1)(2)</sup>			

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.  
 (2) Substitute the desired secondary code for y (key included). See [Key Coding on page 124](#) for code selection.

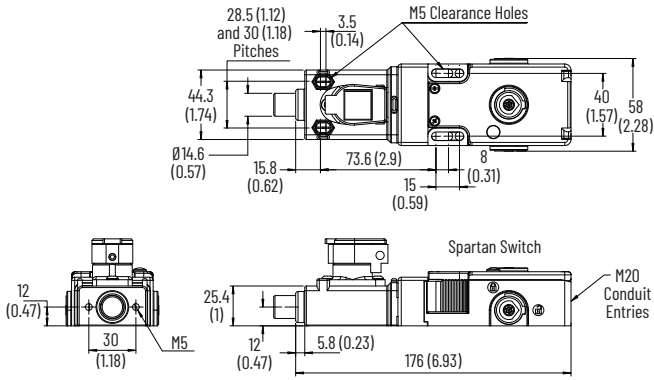
## Accessories

Description	Additional Information	Cat. No.
Stainless-steel key	See <a href="#">Accessories on page 166</a> .	440T-AKEYE10x <sup>(1)</sup>
Stainless-steel replacement code barrel for products other than 100 A RPS/RKS units		440T-ASCBE14x <sup>(1)</sup>
Stainless-steel weatherproof replacement dust cap		440T-ASFC10x <sup>(1)</sup>
Stainless-steel ejector key		440T-AKEYE13x <sup>(1)</sup>

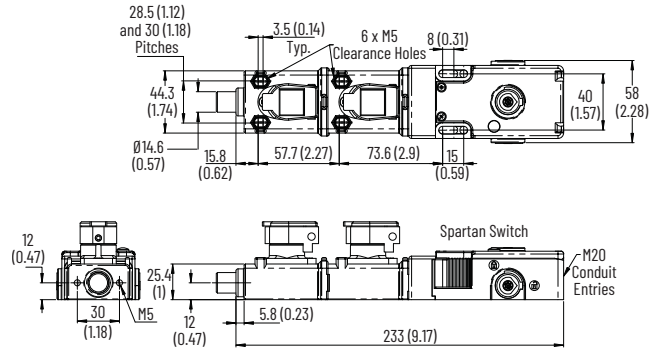
(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.



**Figure 168 - Prosafe Bolt Lock Solenoid Locked with Electrical Isolation - One Key [mm (in.)]**



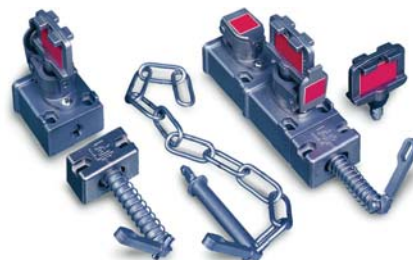
**Figure 169 - Prosafe Bolt Lock Solenoid Locked with Electrical Isolation - Two Keys [mm (in.)]**



## Access and Chains Trapped Key Interlock Switches

The access and chains trapped key interlock switches have the following features:

- 316L stainless-steel construction
- Direct-drive operation
- Fitted with tamper resistant screws
- Lever or chain actuator
- Stainless-steel dust cap as standard
- Replaceable code barrel assembly
- Solenoid and electric versions
- Multiple key options



### Specifications

Attribute	Access and Chains Trapped Key Interlock Switches
Standards Classification (Safety)	EN ISO 14119 and GS-ET-31, and can be used in safety application up to category 3, PLd in accordance with EN ISO 13849-1, and in the application area of EN 60204-1.
Functional Safety Data	PFHD = 1.00E-7 (probability of dangerous failure per hr); T1 = 20 (Proof test interval)
Certifications	CE Marked for all applicable EU directives, UKCA Marked for all applicable regulations, TÜV Certified <a href="http://rok.auto/certifications">rok.auto/certifications</a>
Operating temperature [°C (°F)]	-40...+80 (-40...+176)
Relative humidity	95%
Mechanical life	200,000 operations
Shear force to key	15.1 kN (3394.62 lbf)
Torque to key [N•m (lb•in)]	14 (10.33)
Material	Faceplate: 316L stainless steel
Mounting	<ul style="list-style-type: none"> <li>• SAL and SCL: 2 or 4 x M5 counter-bored from top or 2 or 4 x M5 from underside with nuts</li> <li>• DAL and DCL: 4 or 6 x M5 counter-bored from top or 4 or 6 x M5 from underside with nuts</li> </ul>
Weight	<ul style="list-style-type: none"> <li>• SAL and SCL: 0.8 kg (1.8 lb)</li> <li>• DAL and DCL: 1.35 kg (3 lb)</li> </ul>
Misalignment tolerance [mm (in.)]	±10 (0.39)

## Product Selection

Table 81 - Mechanical Interlock Switch Product Selection

Type	Actuator Type	Keys In / Out	Trapped Key Condition	Cat. No.	
				Standard	Engraved
Single key	Lever	1 key in	Lever inserted (guard is secured) Primary key 1 is free (ordered separately) Insert primary key 1 and rotate 90° CW Turn lever 90° CCW to release the lever Primary key 1 is now trapped (guard can be accessed)	440T-MSALE10x <sup>(1)</sup>	440T-MSALS10x <sup>(1)</sup>
	Chain		Chain/lever inserted (guard is secured) Primary key 1 is free (ordered separately) Insert primary key 1 and rotate 90° CW Turn lever 90° CCW to release the chain/lever Primary key 1 is now trapped (guard can be accessed)	440T-MSCLE10x <sup>(1)</sup>	440T-MSCLS10x <sup>(1)</sup>
	Extended lever		Extended lever inserted (guard is secured) Primary key 1 is free (ordered separately) Insert primary key 1 and rotate 90° CW Turn lever 90° CCW to release the lever Primary key 1 is now trapped (guard can be accessed)	440T-MSALE20x <sup>(1)</sup>	440T-MSALS20x <sup>(1)</sup>
Single key with padlock hasp	Lever	1 key in	Lever inserted (guard is secured) Hasp retracted Primary key 1 is free (ordered separately) Insert primary key 1 and rotate 90° CW Turn lever 90° CCW to release the lever Primary key 1 is now trapped (guard can be accessed)	440T-MSALE11x <sup>(1)</sup>	440T-MSALS11x <sup>(1)</sup>
	Chain		Chain/lever inserted (guard is secured) Hasp retracted Primary key 1 is free (ordered separately) Insert primary key 1 and rotate 90° CW Turn lever 90° CCW to release the chain/lever Primary key 1 is now trapped (guard can be accessed)	440T-MSCLE11x <sup>(1)</sup>	440T-MSCLS11x <sup>(1)</sup>
Dual key	Lever	1 key in/ 1 key out	Lever inserted (guard is secure) Primary key 1 is free (ordered separately) Secondary key 1 is trapped (included w/ product) Insert primary key 1 into the lock and rotate 90° CW Rotate secondary key 190° CCW to release the lever Primary key 1 is now trapped (Guard can be accessed) Secondary key 1 is free (personal key)	440T-MDALE10xy <sup>(1)(2)</sup>	440T-MDALS10xy <sup>(1)(2)</sup>
		2 keys in	Lever inserted (guard is secure) Primary key 1 free (ordered separately) Secondary key 1 is free (ordered separately) Insert primary key 1 and rotate 90° CW Insert secondary key 1 and rotate 90° CW Turn lever 90° CCW to release the lever Primary keys 1 and 2 are now trapped (guard can be accessed)	440T-MDALE11xx <sup>(1)</sup>	440T-MDALST1xx <sup>(1)</sup>
	Chain	1 key in/ 1 key out	Chain/lever inserted (guard is secure) Primary key 1 is free (ordered separately) Secondary key 1 is trapped (included w/ product) Insert primary key 1 into the lock and rotate 90° CW Rotate secondary key 190° CCW to release the chain/lever Primary key 1 is now trapped (guard can be accessed) Secondary key 1 is free (personal key)	440T-MDCLE10xy <sup>(1)(2)</sup>	440T-MDCLS10xy <sup>(1)(2)</sup>
		2 keys in	Chain/lever inserted (guard is secure) Primary key 1 free (ordered separately) Secondary key 1 is free (ordered separately) Insert primary key 1 and rotate 90° CW Insert secondary key 1 and rotate 90° CW Turn lever 90° CCW to release the chain/lever Primary keys 1 and 2 are now trapped (guard can be accessed)	440T-MDCLE11xx <sup>(1)</sup>	440T-MDCLST1xx <sup>(1)</sup>
Dual key with padlock hasp	Lever	1 key in/ 1 key out	Lever inserted (guard is secure) Hasp retracted Primary key 1 is free (ordered separately) Secondary key 1 is trapped (included w/ product) Insert primary key 1 into the lock and rotate 90° CW Rotate secondary key 190° CCW to release the lever Primary key 1 is now trapped (guard can be accessed) Secondary key 1 is free (personal key)	440T-MDALE45xy <sup>(1)(2)</sup>	440T-MDALS45xy <sup>(1)(2)</sup>

Table 81 - Mechanical Interlock Switch Product Selection (Continued)

Type	Actuator Type	Keys In / Out	Trapped Key Condition	Cat. No.	
				Standard	Engraved
Dual key with eject key	Lever	1 key in/ 1 key out	Lever inserted (guard is secure) Primary key 1 free (ordered separately) Secondary key 1 is trapped (included w/ product) Insert primary key 1 and rotate 90° CW Rotate secondary key 1 to 90° CCW to release lever Primary key 1 is now trapped (guard can be accessed) Secondary key 1 ejects free from the lock (personal key)	440T-MDALJ10xy <sup>(1)</sup>	440T-MDAL10xy <sup>(1)</sup>
	Chain	1 key in/ 1 key out	Chain/lever inserted (guard is secure) Primary key 1 free (ordered separately) Secondary key 1 is trapped (included w/ product) Insert primary key 1 and rotate 90° CW Rotate secondary key 1 to 90° CCW to release the chain/lever Primary key 1 is now trapped (guard is secure) Secondary key 1 ejects free from the lock (personal key)	440T-MDCLJ10xy <sup>(1)(2)</sup>	440T-MDCL10xy <sup>(1)(2)</sup>
Triple key	Lever	1 key in/ 2 keys out	Lever inserted (guard is secure) Primary key 1 free (ordered separately) Secondary key 1 and key 2 are trapped (included w/ product) Insert primary key 1 into the lock and rotate 90° CW Rotate secondary keys in sequence 90° CCW to release Lever Primary key 1 is now trapped (guard can be accessed) Secondary keys are free (personal keys)	440T-MTALE11xyy <sup>(1)(2)</sup>	440T-MTALST11xyy <sup>(1)(2)</sup>
	Chain	1 key in/ 2 keys out	Chain/lever inserted (guard is secured) Primary key 1 free (ordered separately) Secondary key 1 and key 2 are trapped (included w/ product) Insert primary key 1 into the lock and rotate 90° CW Rotate secondary keys in sequence 90° CCW to release Chain/lever Primary key 1 is now trapped (guard can be accessed) Secondary keys are free (personal keys)	440T-MTCLE11xyy <sup>(1)(2)</sup>	440T-MTCLST11xyy <sup>(1)(2)</sup>
Quad key	Lever	1 key in/ 3 keys out	Lever inserted (guard is secure) Primary key 1 free (ordered separately) Secondary key 1, key 2, and key 3 are trapped (included w/ product) Insert primary key 1 into the lock and rotate 90° CW Rotate secondary keys in sequence 90° CCW to release Lever Primary key 1 is now trapped (guard can be accessed) Secondary keys are free (personal keys)	440T-MQALE11xyy <sup>(1)(2)</sup>	440T-MQALST11xyy <sup>(1)(2)</sup>
Five-way key	Lever	1 key in/ 4 keys out	Lever inserted (guard is secure) Primary key 1 free (ordered separately) Secondary key 1, key 2, key 3, and key 4 are trapped (included w/ product) Insert primary key 1 into the lock and rotate 90° CW Rotate secondary keys in sequence 90° CCW to release Lever Primary key 1 is now trapped (guard can be accessed) Secondary keys are free (personal keys)	440T-MPALE11xyy <sup>(1)(2)</sup>	440T-MPALST11xyy <sup>(1)(2)</sup>
	Ejector key	1 key in/ 4 keys out	Lever inserted (guard is secure) Primary key 1 free (ordered separately) Secondary key 1, key 2, key 3, and key 4 are trapped (included w/ product) Insert primary key 1 into the lock and rotate 90° CW Rotate secondary keys in sequence 90° CCW to release Lever Primary key 1 is now trapped (guard can be accessed) Secondary keys eject free from the lock (personal keys)	440T-MPALJ11xyy <sup>(1)(2)</sup>	440T-MPAL11xyy <sup>(1)(2)</sup>

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.(2) Substitute the desired secondary code for y (key included). See [Key Coding on page 124](#) for code selection.

Table 82 - Electrical and Solenoid Interlock Switch Product Selection

Contact Type	Type	Actuator Type	Keys In/Out	Trapped Key Condition	Cat. No.	
					Standard	Engraved
2 N.C. and 1 N.O. break before make	Dual key	Lever	1 key in/ 1 key out	Lever inserted (guard is secured) Primary key 1 is free (ordered separately) Secondary key 1 is trapped (included w/ product) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Insert primary key 1 into the lock and rotate 90° CW 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Rotate secondary key 1 to 90° CCW to release the lever Primary key is now trapped (guard can be accessed) Secondary key is free (personal key)	440T-MDASE20xy <sup>(1)(2)</sup>	440T-MDASS20xy <sup>(1)(2)</sup>
			2 keys in	Lever inserted (guard is secured) Primary key 1 free (ordered separately) Secondary key 1 is free (ordered separately) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Insert primary key 1 and rotate 90° CW Primary key 1 is now trapped Insert secondary key 1 and rotate 90° CW to release lever 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Secondary key is trapped (guard can be accessed)	440T-MDASE20xy <sup>(1)(2)</sup>	440T-MDASS21xy <sup>(1)(2)</sup>
		Chain	1 key in/ 1 key out	Chain/lever inserted (guard is secured) Primary key 1 is free (ordered separately) Secondary key 1 is trapped (included w/ product) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Insert primary key 1 into the lock and rotate 90° CW 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Rotate secondary key 1 to 90° CCW to release the chain/lever Primary key is now trapped (guard can be accessed) Secondary key is free (personal key)	440T-MDCSE20xy <sup>(1)(2)</sup>	440T-MDCSS20xy <sup>(1)(2)</sup>
			2 keys in	Chain/lever inserted (guard is secured) Primary key 1 free (ordered separately) Secondary key 1 is free (ordered separately) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Insert primary key 1 and rotate 90° CW Primary key 1 is now trapped Insert secondary key 1 and rotate 90° CW to release chain/lever 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Secondary key is trapped (guard can be accessed)	440T-MDCSE21xx <sup>(1)</sup>	440T-MDCSS21xx <sup>(1)</sup>
Solenoid		Lever	1 key in/ 1 key out	Lever Inserted - contacts closed (guard is secure) Primary key 1 is free (ordered separately) Secondary key 1 is trapped (included w/ product) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Insert primary key 1 (cannot be rotated until power is applied to the solenoid) Apply 24V DC to the solenoid 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Rotate primary key 1 to 90° CW, key is now trapped Rotate secondary key 1 to 90° CCW to release the lever Secondary key 1 is free (personal key) (guard can be accessed)	440T-MDAUE20xy <sup>(1)(2)</sup>	

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

(2) Substitute the desired secondary code for y (key included). See [Key Coding on page 124](#) for code selection.

## Accessories

Description	Additional Information	Cat. No.
Stainless-steel key	See <a href="#">Accessories on page 166</a> .	440T-AKEYE10x <sup>(1)</sup>
Stainless-steel replacement code barrel for products other than 100 A RPS/RKS units		440T-ASCBE14x <sup>(1)</sup>
Stainless-steel weatherproof replacement dust cap		440T-ASFC10x <sup>(1)</sup>
Replacement spare block catch		440T-ACAD10
Replacement spare chain catch		440T-ACHA10
Stainless-steel ejector key		440T-AKEYE13x <sup>(1)</sup>

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

## Approximate Dimensions

Figure 170 - Mechanical, Single Key, Lever Actuator [mm (in.)]

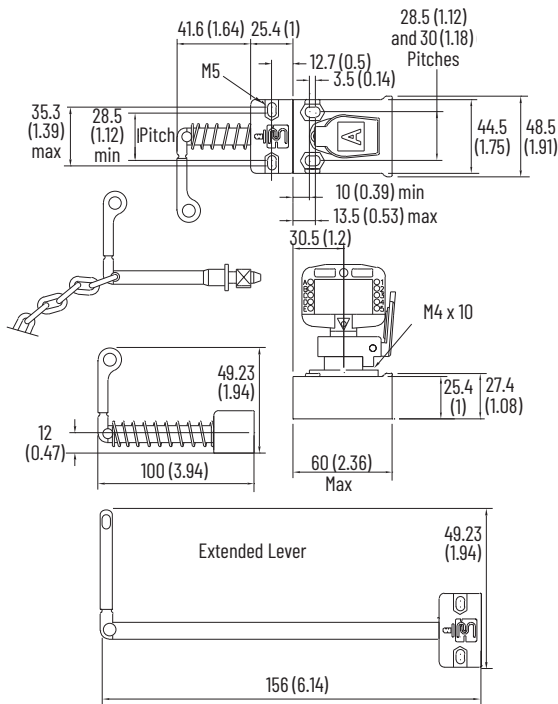


Figure 172 - Mechanical, Five Way, Lever Actuator [mm (in.)]

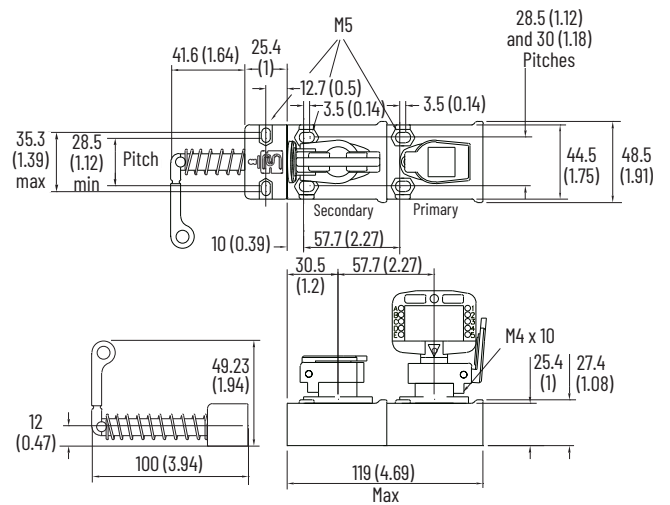


Figure 173 - Electrical, Dual Key, Chain Actuator [mm (in.)]

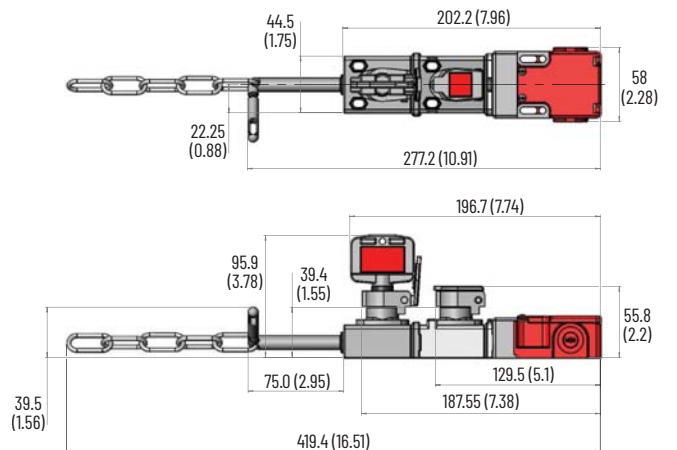
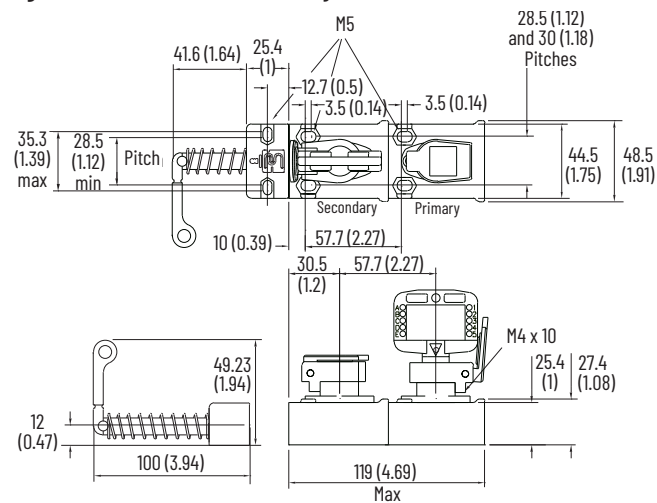
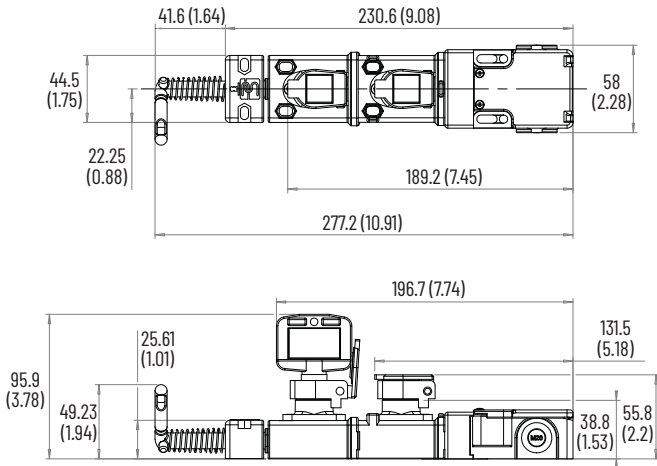


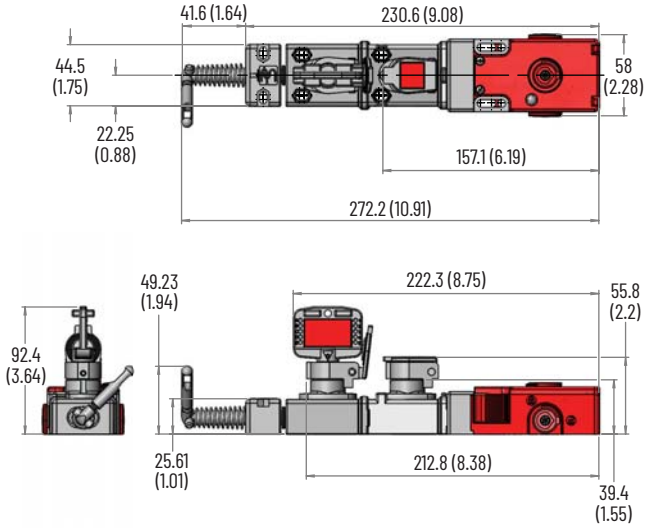
Figure 171 - Mechanical, Dual Key, Lever Actuator [mm (in.)]



**Figure 174 - Electrical, Dual Key, Lever Actuator [mm (in.)]**



**Figure 175 - Solenoid, Dual Key, Lever Actuator [mm (in.)]**



## Prosafe Slamlock Mechanical Interlock Switches

The Prosafe® Slamlock™ mechanical interlock switches have the following features:

- 316L stainless-steel construction
- Selection of actuator types available
- Direct-drive operation
- Replaceable code barrel assembly
- Fitted with tamper resistant screws
- Weatherproof stainless-steel dust cap as standard
- Multiple key options



Single



Double

## Specifications

Attribute	Prosafe Slamlock Mechanical Interlock Switches
Standards Classification (Safety)	EN ISO 14119 and GS-ET-31, and can be used in safety application up to category 3, PLd in accordance with EN ISO 13849-1, and in the application area of EN 60204-1.
Functional Safety Data	PFHD = 1.00E-7 (probability of dangerous failure per hr); T1 = 20 (Proof test interval)
Certifications	CE Marked for all applicable EU directives, UKCA Marked for all applicable regulations, TÜV Certified <a href="http://rok.auto/certifications">rok.auto/certifications</a>
Operating temperature [°C (°F)]	-40...+80 (-40...+176)
Relative humidity	95%
Mechanical life	200,000 operations
Shear force to key, max	15.1 kN (3394.62 lbf)
Torque to key, max [N•m (lb•in)]	14 (10.33)
Material	316L stainless steel
Mounting	<ul style="list-style-type: none"> <li>• SSL: 2 x M5 counter-bored from top or 2 x M5 from underside with nuts</li> <li>• DSS: 4 x M5 counter-bored from top or 4 x M5 from underside with nuts</li> </ul>
Weight	<ul style="list-style-type: none"> <li>• Single key: 0.76 kg (1.68 lb)</li> <li>• Dual key: 1.33 kg (2.93 lb)</li> </ul>
Holding force, max	2000 N (450 lb)

## Product Selection

Table 83 - Prosafe Slamlock Mechanical Interlock Switch Product Selection

Type	Actuator Type	Keys In / Out	Trapped Key Condition	Cat. No.	
				Standard	Engraved
Single key	Standard	1 key in	Actuator is inserted (guard is secure) Primary key 1 free (ordered separately) Insert primary key 1 and rotate 90° CW Actuator is released Primary key is now trapped (guard can be accessed)	440T-MSSLE10x <sup>(1)</sup>	440T-MSSLS10x <sup>(1)</sup>
	Flexible			440T-MSSLE11x <sup>(1)</sup>	440T-MSSLS11x <sup>(1)</sup>
	Flat			440T-MSSLE12x <sup>(1)</sup>	440T-MSSLS12x <sup>(1)</sup>
Dual key	Standard	1 key in / 1 key out	Actuator is inserted (guard is secure) Primary key 1 is free (ordered separately) Secondary Key 1 is trapped (included w/ product) Insert primary key 1 and rotate 90° CW Rotate secondary key 1 to 90° CCW to release the actuator Primary key 1 is now trapped (guard is secure) Secondary key 1 is free (personal key)	440T-MDSLE10xy <sup>(1)(2)</sup>	440T-MDSLS10xy <sup>(1)(2)</sup>
	Flexible			440T-MDSLE11xy <sup>(1)(2)</sup>	440T-MDSLS11xy <sup>(1)(2)</sup>
	Flat			440T-MDSLE12xy <sup>(1)(2)</sup>	440T-MDSLS12xy <sup>(1)(2)</sup>
	Standard	2 keys in	Actuator is inserted (guard is secure) Primary keys are free (ordered separately) Insert primary key 1 and rotate 90° CW Insert primary key 2 and rotate 90° CW to release the actuator Primary keys are now trapped (guard can be accessed)	440T-MDSLE20xx <sup>(1)</sup>	440T-MDSLS20xx <sup>(1)</sup>
	Flexible			440T-MDSLE22xx <sup>(1)</sup>	440T-MDSLS22xx <sup>(1)</sup>
	Flat			440T-MDSLE23xx <sup>(1)</sup>	440T-MDSLS23xx <sup>(1)</sup>
Dual with secondary ejector key	Standard	1 key in / 1 key out	Actuator is inserted (guard is secure) Primary key 1 free (ordered separately) Secondary ejector key 1 is trapped (included w/ product) Insert primary key 1 and rotate 90° CW Rotate secondary key 1 to 90° CCW to release actuator Primary key 1 is now trapped (guard is secure) Secondary key 1 ejects free from the lock (personal key)	440T-MDSLJ10xy <sup>(1)(2)</sup>	440T-MDSL10xy <sup>(1)(2)</sup>
	Flexible			440T-MDSLJ11xy <sup>(1)(2)</sup>	440T-MDSL11xy <sup>(1)(2)</sup>
	Flat			440T-MDSLJ12xy <sup>(1)(2)</sup>	440T-MDSL12xy <sup>(1)(2)</sup>

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.  
 (2) Substitute the desired secondary code for y (key included). See [Key Coding on page 124](#) for code selection.

## Accessories

Description	Additional Information	Cat. No.
Stainless-steel key	See <a href="#">Accessories on page 166</a> .	440T-AKEYE10x <sup>(1)</sup>
Stainless-steel replacement code barrel for products other than 100 A RPS/RKS units		440T-ASCB14x <sup>(1)</sup>
Stainless-steel weatherproof replacement dust cap		440T-ASF10x <sup>(1)</sup>
GD2 standard actuator		440G-A27011
GD2 flat actuator		440K-AT112
Fully flexible actuator		440G-A27143
Stainless-steel ejector key		440T-AKEYE13x <sup>(1)</sup>

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

## Approximate Dimensions

Figure 176 - Single Key Slamlock [mm (in.)]

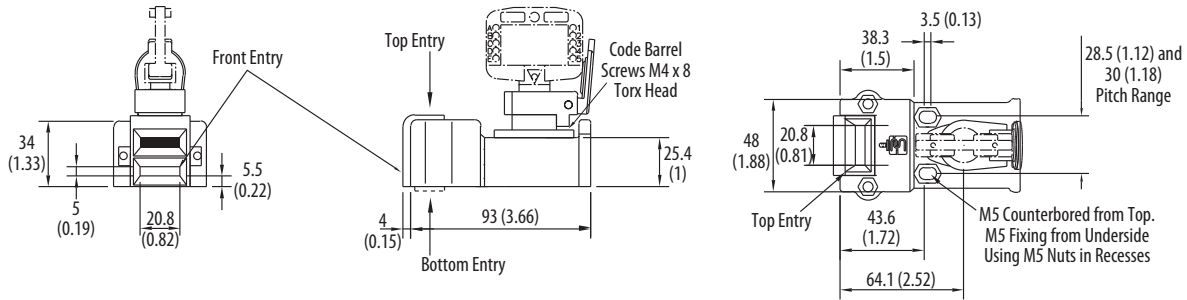


Figure 177 - Dual Key Slamlock [mm (in.)]

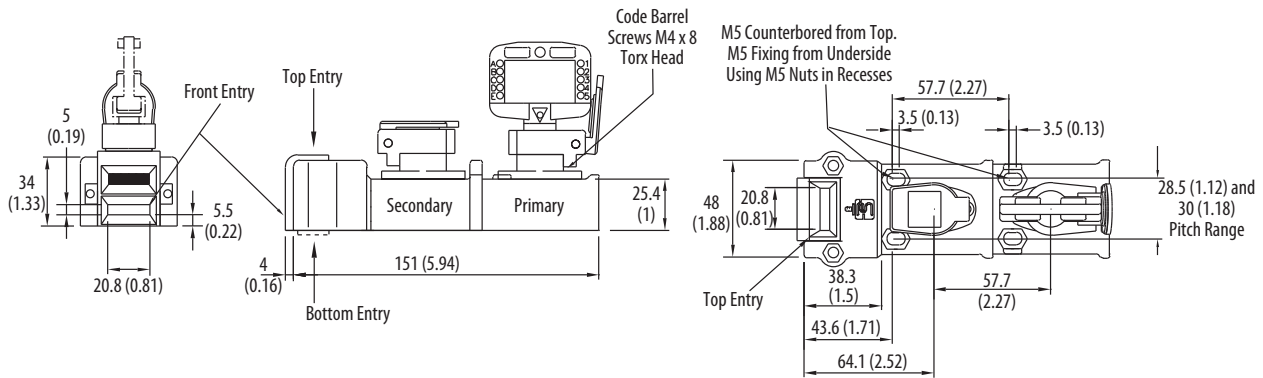
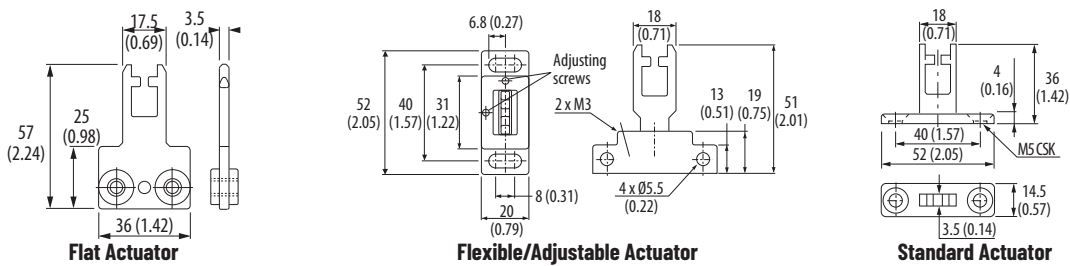


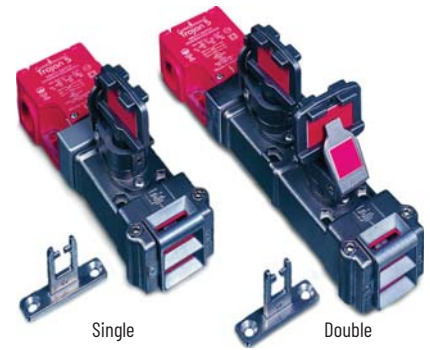
Figure 178 - Actuators [mm (in.)]



## Prosafe Slamlock Electrical Interlock Switches

The Prosafe Slamlock electrical interlock switches have the following features:

- Electrical safety contacts combined with trapped key/enforced sequence feature
- Most of the unit is constructed from 316L stainless steel
- Selection of actuator types available
- Single or dual key versions available
- Direct-drive operation
- Replaceable code barrel assembly
- Weatherproof stainless-steel dust cap as standard
- Solenoid versions



## Specifications

Attribute	Prosafe Slamlock Electrical Interlock Switches		
Standards Classification (Safety)	EN ISO 14119 and GS-ET-31, and can be used in safety application up to category 3, PLd in accordance with EN ISO 13849-1, and in the application area of EN 60204-1.		
Functional Safety Data	PFHD = 1.00E-7 (probability of dangerous failure per hr); T1 = 20 (Proof test interval)		
Certifications	CE Marked for all applicable EU directives, UKCA Marked for all applicable regulations, TÜV Certified <a href="http://rok.auto/certifications">rok.auto/certifications</a>		
Operating temperature [°C (°F)]	-20...+80 (-4...+176)		
Relative humidity	95%		
Mechanical life	200,000 operations		
Shear force to key, max	15.1 kN (3394.62 lbf)		
Torque to key, max [N•m (lb•in)]	14 (10.33)		
Case material	<ul style="list-style-type: none"> <li>• 316L stainless steel</li> <li>• UL approved glass-filled polyester</li> </ul>		
Actuator material	Stainless steel		
Mounting	<ul style="list-style-type: none"> <li>• SSS: 4 x M5 counter-bored from top or 4 x M5 from underside with nuts</li> <li>• DSS: 6 x M5 counter-bored from top or 6 x M5 from underside with nuts</li> </ul>		
Weight	<ul style="list-style-type: none"> <li>• SSE: 1160 kg (2.6 lb)</li> <li>• DSSE: 1700 kg (3.7 lb)</li> </ul>		
Holding force, max	2000 N (450 lb)		
Releasable load, max	100 N (22.5 lb)		
Safety contacts	2 N.C. positive break		
AC 15—Ue	500V	250V	100V
AC 15—Ie	1 A	2 A	5 A
DC	250V	0.5 A, 24V	2 A
Switching current at voltage, max	500V/500V A		
Thermal current ( $I_{th}$ )	10 A		
Current, min	5V, 5 mA, DC		
Safety contact gap	>2 x 2 mm (0.07 in)		
Rated insulation voltage ( $U_i$ )	500V		
Rated impulse withstand voltage ( $U_{imp}$ )	2500V		
Auxiliary contacts	1 N.O.		
Pollution degree	3		
Actuator travel for positive opening [mm (in.)]	5 (0.19)		
Operating radius, min [mm (in.)]	175 (6.88) (60 (2.36) with flexible actuator)		
Break contact force, min	12 N (2.7 lbs)		
Actuation speed, max [m/s (ft/s)]	1 (3.28)		
Actuation frequency, max	2 cycle/s		
Conduit entry	3 x M20		
Color	Red/stainless		

## Product Selection

Table 84 - Electrical Slamlock Product Selection

Contact Type	Type	Actuator Type	Keys In / Out	Trapped Key Condition	Connector	Cat. No.			
						Standard	Engraved		
2 N.C. + 1 N.O. Break before make	Single key	Standard	1 key in	Actuator inserted - contacts closed (guard is secure) Primary key 1 is free (ordered separately) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state	QD M12 (6-pin dual key)	440T-MS3470x <sup>(1)</sup>	-		
		Flexible		Insert the primary 1 key and rotate 90° CW to release the actuator		440T-MSSSE10x <sup>(1)</sup>	440T-MSSSS10x <sup>(1)</sup>		
		Flat		2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Primary key 1 is now trapped (guard can be accessed)		440T-MSSSE11x <sup>(1)</sup>	440T-MSSSS11x <sup>(1)</sup>		
		Standard	1 key out	Actuator inserted - contacts closed (guard is secure) Primary key 1 trapped (ordered separately) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state		440T-MSSSE12x <sup>(1)</sup>	440T-MSSSS12x <sup>(1)</sup>		
		Flexible		Rotate primary key 1 to 90° CCW to release the actuator		440T-MSSSE20x <sup>(1)</sup>	440T-MSSSS20x <sup>(1)</sup>		
		Flat		2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Primary key is now free (guard can be accessed)		440T-MSSSE22x <sup>(1)</sup>	440T-MSSSS22x <sup>(1)</sup>		
	Dual key	Standard	1 key in / 1 key out	Actuator inserted - contacts closed (guard is secure) Primary key 1 is free (ordered separately) Secondary key 1 is trapped (included w/ product) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state	M20 conduit entry	440T-MDSSE10xy <sup>(1)(2)</sup>	440T-MDSSS10xy <sup>(1)(2)</sup>		
		Flexible		Insert primary key 1 into the lock and rotate 90 degrees CW Primary key 1 is now trapped		440T-MDSSE11xy <sup>(1)(2)</sup>	440T-MDSSS11xy <sup>(1)(2)</sup>		
		Flat		Rotate secondary key 1 CCW to release the actuator 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Secondary key 1 is now free (guard can be accessed)		440T-MDSSE12xy <sup>(1)(2)</sup>	440T-MDSSS12xy <sup>(1)(2)</sup>		
		Standard	Actuator inserted - contacts closed (guard is secure) Primary key 1 is free (ordered separately) Secondary ejector key 1 is trapped (included w/ product) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state	440T-MDSSJ10xy <sup>(1)(2)</sup>		440T-MDSSJ10xy <sup>(1)(2)</sup>			
		Flexible	Insert primary key 1 and rotate 90 degrees CW Primary key 1 is now trapped	440T-MDSSJ11xy <sup>(1)(2)</sup>		440T-MDSSJ11xy <sup>(1)(2)</sup>			
		Flat	Rotate secondary key 1 - 90 degrees CCW to release the actuator 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Secondary key 1 will eject free from the lock (personal key) (guard can be accessed)	440T-MDSSJ12xy <sup>(1)(2)</sup>		440T-MDSSJ12xy <sup>(1)(2)</sup>			
		Standard	2 keys in	Actuator inserted - contacts closed (guard is secure) Primary key 1 is free (ordered separately) Primary key 2 is free (ordered separately) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state		440T-MDSSE20xx <sup>(1)</sup>	440T-MDSSS20xx <sup>(1)</sup>		
		Flexible		Insert primary key 1 and rotate 90 degrees CW Insert primary key 2 and rotate 90 degrees CW to release actuator		440T-MDSSE22xx <sup>(1)</sup>	440T-MDSSS22xx <sup>(1)</sup>		
		Flat		2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Primary keys are now trapped (guard can be accessed)		440T-MDSSE23xx <sup>(1)</sup>	440T-MDSSD23xx <sup>(1)</sup>		
		2 N.C. + 2 N.O. Break before make	Single key	Standard		1 key in	Actuator inserted - contacts closed (guard is secure) Primary keys are free (ordered separately) 2 N.C. safety contacts are in the closed state 2 N.O. contact is in the open state	440T-MSSSE26x <sup>(1)</sup>	440T-MSSSS26x <sup>(1)</sup>
				Flexible			Insert the primary 1 key and rotate 90° CW to release the actuator	440T-MSSSE27x <sup>(1)</sup>	440T-MSSSS27x <sup>(1)</sup>
				Flat			2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Primary key 1 is now trapped (guard can be accessed)	440T-MSSSE25x <sup>(1)</sup>	440T-MSSSS25x <sup>(1)</sup>

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.  
 (2) Substitute the desired secondary code for y (key included). See [Key Coding on page 124](#) for code selection.

Table 85 - Solenoid Interlock Switch Product Selection

Contact Type	Type	Keys In / Out	Trapped Key Condition	Solenoid Voltage	Actuator Type	Connector	Cat. No.		
							Standard	Engraved	
2 N.C. + 1 N.O. Break before make	Single key	1 key out	Actuator inserted - contacts closed (guard is secure) Primary key 1 is trapped (ordered separately) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Apply 24V DC to the solenoid Rotate primary key 90° CCW to release the actuator 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Primary key 1 is now free (guard can be accessed)	24V DC	Standard	M23 (12-pin)	440T-MS3465x <sup>(1)</sup>	-	
							Flexible	440T-MSSUE20x <sup>(1)</sup>	440T-MSSUS20x <sup>(1)</sup>
								440T-MSSUE22x <sup>(1)</sup>	440T-MSSUS22x <sup>(1)</sup>
	Dual key	1 key in / 1 key out	Actuator inserted - contacts closed (guard is secure) Primary key 1 is free (ordered separately) Secondary key 1 trapped (included w/ product) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Apply 24V DC to the solenoid Insert primary key 1 and rotate 90° CW Primary key 1 is now trapped Rotate secondary key 1 to 90° CCW to release the actuator 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Secondary key 1 is now free (personal key) (guard can be accessed)	24V DC	Standard	M20 conduit entry	440T-MDSUE10xy <sup>(1)(2)</sup>	440T-MDSUS10xy <sup>(1)(2)</sup>	
							Flexible	440T-MDSUE11xy <sup>(1)(2)</sup>	440T-MDSUE11xy <sup>(1)(2)</sup>
								Flat	440T-MDSUE12xy <sup>(1)(2)</sup>
	Single key	1 key out	Actuator inserted - contacts closed (guard is secure) Primary key 1 is trapped (ordered separately) 2 N.C. safety contacts are in the closed state 1 N.O. contact is in the open state Apply 110V AC to the solenoid Rotate primary key 90° CCW to release the actuator 2 N.C. safety contacts are in the open state 1 N.O. contact in the closed state Primary key 1 is now free (guard can be accessed)	110V AC	Standard		440T-MSSUE50x <sup>(1)</sup>	440T-MSSUS50x <sup>(1)</sup>	

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.  
 (2) Substitute the desired secondary code for y (key included). See [Key Coding on page 124](#) for code selection.

### Accessories

Description	Additional Information	Cat. No.
Stainless-steel key	See <a href="#">Accessories on page 166</a> .	440T-AKEYE10x <sup>(1)</sup>
Stainless-steel replacement code barrel for products other than 100 A RPS/RKS units		440T-ASCBE14x <sup>(1)</sup>
Stainless-steel weatherproof replacement dust cap		440T-ASF10x <sup>(1)</sup>
GD2 standard actuator		440G-A27011
GD2 flat actuator		440K-A11112
Fully flexible actuator		440G-A27143
Stainless-steel ejector key		440T-AKEYE13x <sup>(1)</sup>

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

## Approximate Dimensions

Figure 179 - Electrical Single Key Slamlock [mm (in.)]

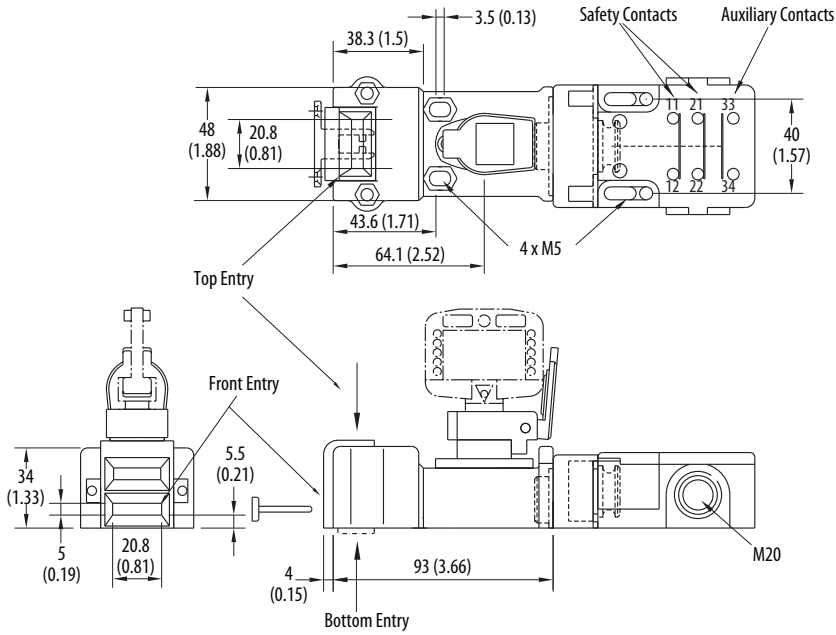


Figure 180 - Electrical Dual Key Slamlock [mm (in.)]

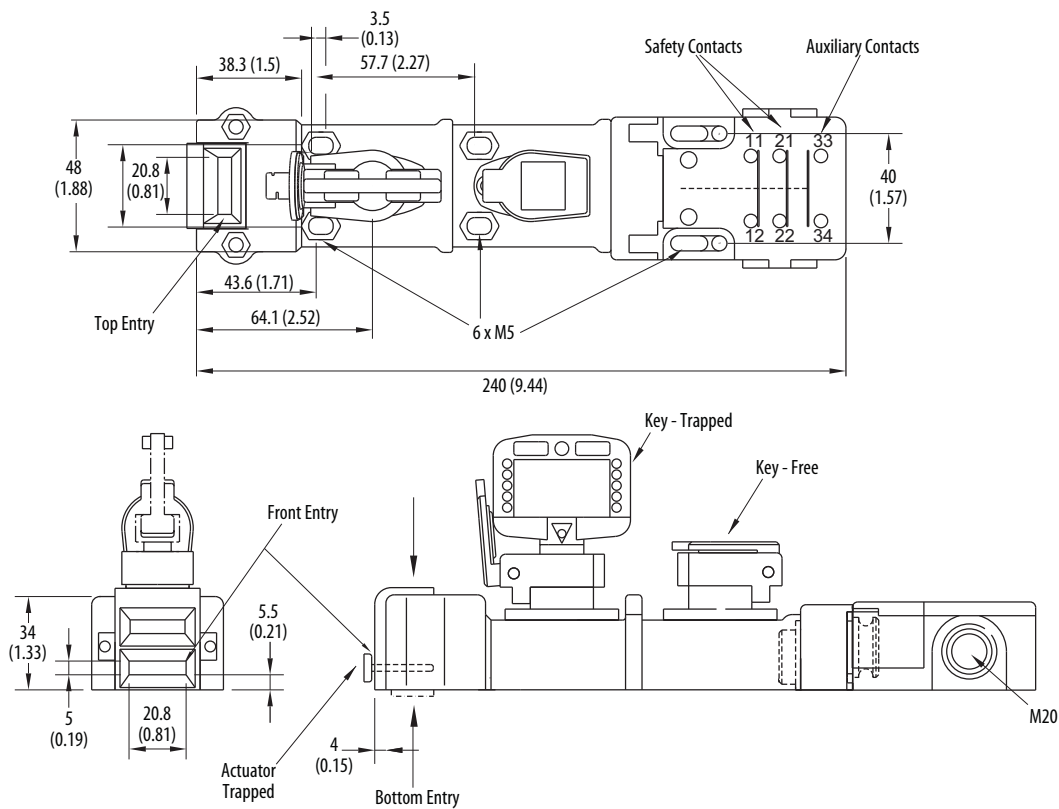


Figure 181 - Solenoid Single Key Slamlock [mm (in.)]

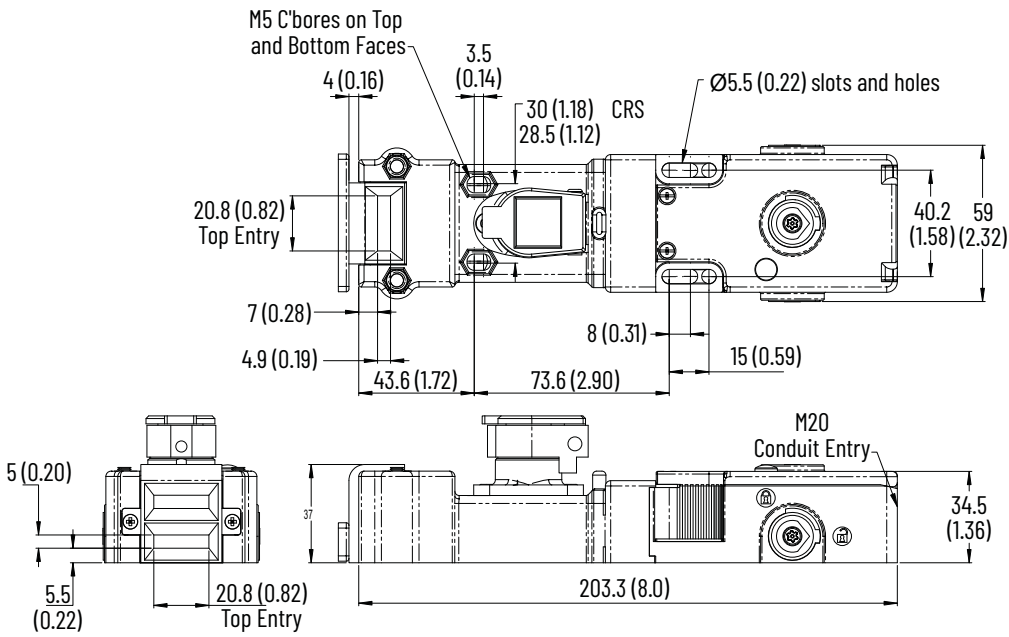
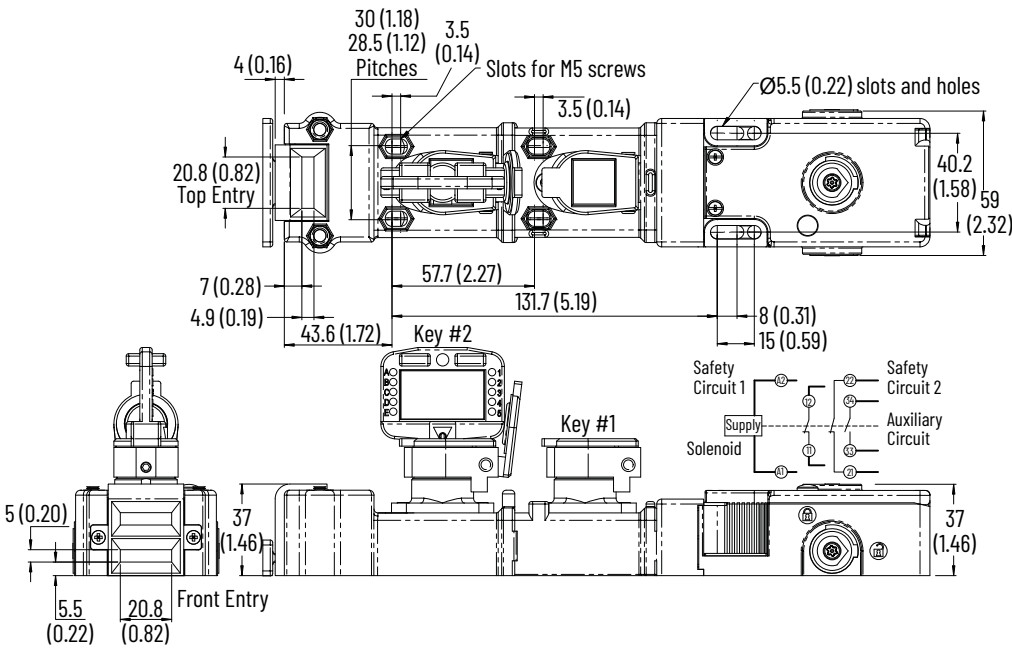


Figure 182 - Solenoid Double Key Slamlock [mm (in.)]



## Miniature Valve Trapped Key Interlock Switches

The miniature valve trapped key interlock switches have the following features:

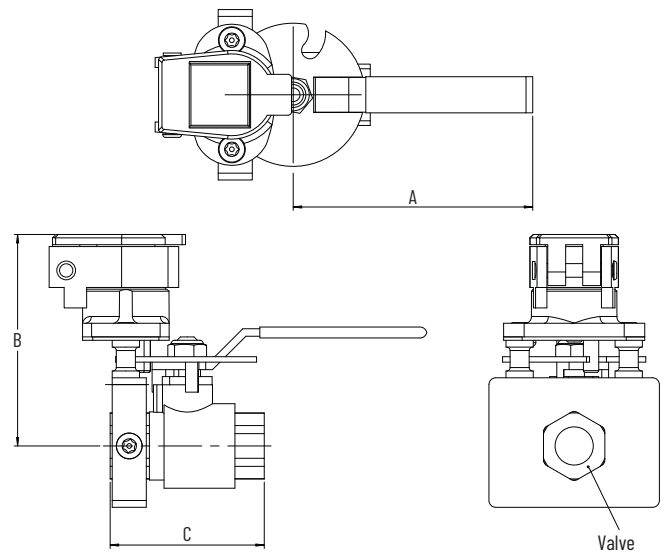
- Direct-drive operation
- Supplied with valves 0.25...2 inch
- Direct body mounting with security screws
- Locked open or locked closed options
- Lower maintenance cost
- Weatherproof stainless-steel dust cap as standard
- Replaceable code barrel assembly
- Valve is chrome-plated brass



### Specifications

Attribute	Miniature Valve Trapped Key Interlock Switches
Standards Classification (Safety)	EN ISO 14119 and GS-ET-31, and can be used in safety application up to category 3, PLd in accordance with EN ISO 13849-1, and in the application area of EN 60204-1.
Functional Safety Data	PFHD = 1.00E-7 (probability of dangerous failure per hr); T1 = 20 (Proof test interval)
Certifications	CE Marked for all applicable EU directives, UKCA Marked for all applicable regulations, TÜV Certified <a href="http://rok.auto/certifications">rok.auto/certifications</a>
Operating temperature [°C (°F)]	-40...+80 (-40...+176)
Relative humidity	25...95%
Mechanical life	200,000 operations
Shear force to key, max	15.1 kN (3394.62 lbf)
Torque to key, max [N·m (lb·in)]	14 (10.33)
Pressure, max	2100 kPa
Material	316L stainless steel

### Approximate Dimensions



### Product Selection

Valve Size - Inch BSP <sup>(1)</sup>	Valve Status	Cat. No. <sup>(2)</sup>
0.25	Key free/valve locked closed	440T-VMVLE10x
0.375		440T-VMVLE11x
0.5		440T-VMVLE12x
0.25	Key free/valve locked open	440T-VMVLE13x
0.375		440T-VMVLE14x
0.5		440T-VMVLE15x
1.0	Key free/valve locked closed	440T-VMVLE18x
	Key free/valve locked open	440T-VMVLE19x

(1) BSP = British standard pipe threads

(2) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

Cat. No.	[mm (in.)]			Valve Size	Pressure [bar (kg/cm <sup>2</sup> )]
	A	B	C		
440T-VMVLE10	70 [2.75]	62 [2.44]	45 [1.77]	0.25 in. BSP	40
440T-VMVLE11			47 [1.85]	0.375 in. BSP	50
440T-VMVLE12	96 [3.78]	64 [2.52]	62 [2.44]	0.5 in. BSP	40
440T-VMVLE13	70 [2.75]	62 [2.44]	45 [1.77]	0.25 in. BSP	40
440T-VMVLE14			47 [1.85]	0.375 in. BSP	50
440T-VMVLE15	96 [3.78]	64 [2.52]	62 [2.44]	0.5 in. BSP	40
440T-VMVLE18	110 [4.33]	71 [2.79]	84 [3.31]	1 in. BSP	40
440T-VMVLE19					
440T-VMVLE20	162 [6.38]	96 [3.78]	125 [4.92]	2 in. BSP	40
440T-VMVLE21					

## Switchgear Adapters

The trapped key switchgear adapters help you lower maintenance costs.



### Specifications

Attribute	Switchgear Adapters
Standards Classification (Safety)	EN ISO 14119 and GS-ET-31, and can be used in safety application up to category 3, PLd in accordance with EN ISO 13849-1, and in the application area of EN 60204-1.
Functional Safety Data	PFHD = 1.00E-7 (probability of dangerous failure per hr); T1 = 20 (Proof test interval)
Certifications	CE Marked for all applicable EU directives, UKCA Marked for all applicable regulations, TÜV Certified <a href="http://rok.auto/certifications">rok.auto/certifications</a>
Operating temperature [°C (°F)]	-10...+50 (14...122)
Mechanical life	200,000 operations
Shear force to key, max	15.1 kN (3394.62 lbf)
Torque to key, max [N•m (lb•in)]	14 (10.33)
Relative humidity	95%
Weight [kg (lb)]	316L stainless steel
Mounting	2 x M4
Shaft dimensions	3/8 in. <sup>2</sup> x 7/8 in. long (standard) 9/16 in. diameter x 7/8 in. long (optional, contact your local Allen-Bradley distributor or Rockwell Automation sales office.)

### Product Selection (3/8 sq shaft)

Mounting	Trap Direction	Cat. No.
2 x M4	65° clockwise to trap	440T-MSGAU10
	65° counterclockwise to trap	440T-MSGAU11
	90° clockwise to trap	440T-MSGAU12
	90° counterclockwise to trap	440T-MSGAU13
	±90° counterclockwise to trap	440T-MSGAU14
	45° clockwise to trap	440T-MSGAU17
	45° counterclockwise to trap	440T-MSGAU18

### Accessories

Description	Additional Information	Cat. No. (1)
Stainless-steel key	See <a href="#">Accessories on page 166</a> .	440T-AKEYE10x
Stainless-steel replacement code barrel for products other than 100 A RPS/RKS units		440T-ASCBE14x
Stainless-steel weatherproof replacement dust cap		440T-ASFC10x

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.



**WARNING:** The presence of spare keys, override keys, or spare actuators can compromise the integrity of safety interlocking systems. Personal injury or death, property damage, or economic loss can result from the introduction of spare keys, override keys or spare actuators into interlocking systems without appropriate management controls, working procedures and alternative protective measures to control their use and availability.

## Approximate Dimensions

Figure 183 - 440T-MSGAU1x and 440T-MSGAU22x [mm (in.)]

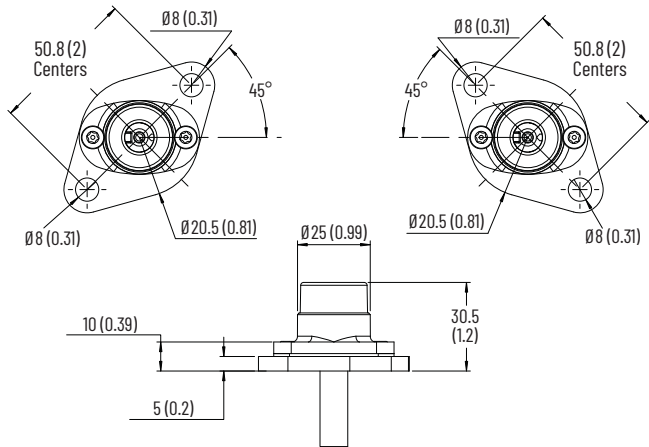


Figure 184 - 440T-MSGAU20x [mm (in.)]

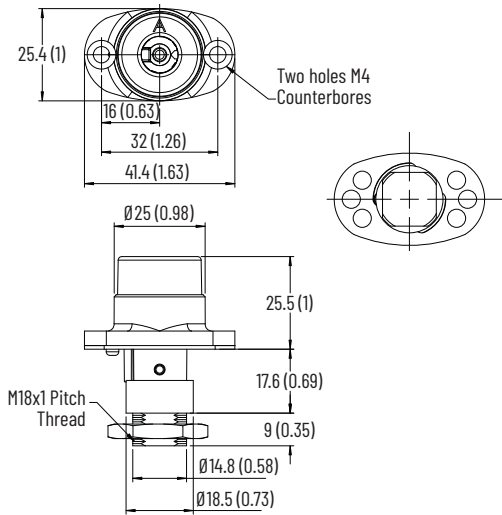


Figure 185 - 440T-MSGAU21x [mm (in.)]

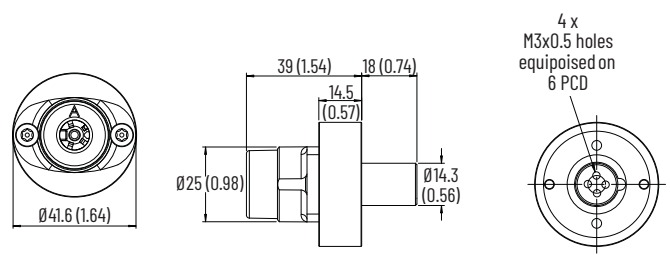
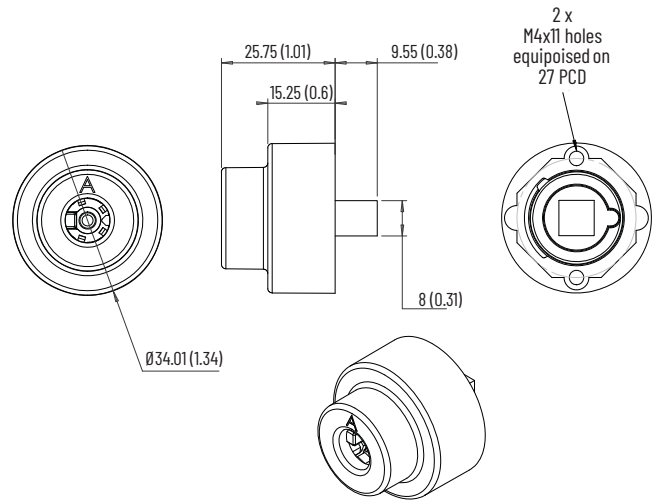

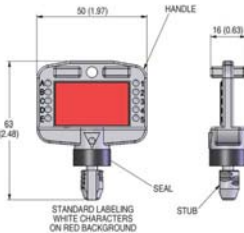

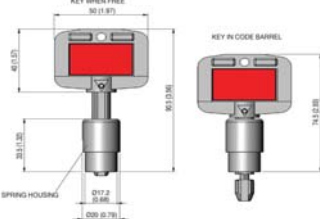

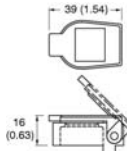



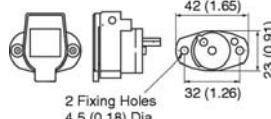



Figure 186 - 440T-MSGAU23x [mm (in.)]



## Accessories

	Description		Cat. No.
	Stainless-steel key		440T-AKEYE10x <sup>(1)</sup>
	Stainless-steel ejector key		440T-AKEYE13x <sup>(1)</sup>
	Stainless-steel weatherproof replacement dust cap		440T-ASFC10x <sup>(1)</sup>
	Stainless-steel replacement code barrel for 100 A unit rotary switch		440T-ASCBE11x <sup>(1)</sup>
	Stainless-steel replacement code barrel with dust cap <sup>(2)</sup>		440T-ASCBE14x <sup>(1)</sup>
	Emergency break glass key box	Plastic case	440T-AIPB11
		Metal case with hammer	440T-AIPB12
	Emergency repair kit for code barrels <sup>(2)</sup>	ER1	440T-AKITE45ER1
		ER2	440T-AKITE45ER2
		ER3	440T-AKITE45ER3
		ER4	440T-AKITE45ER4
		ER5	440T-AKITE45ER5
		ER6	440T-AKITE45ER6
		ER7	440T-AKITE45ER7
		ER8	440T-AKITE45ER8
		ER9	440T-AKITE45ER9

(1) Substitute the desired primary code for x (key not included). See [Key Coding on page 124](#) for code selection.

(2) Not suitable for 440T-MRKSE14/440T-MRPSE14 OR 440T-MSGAU units.