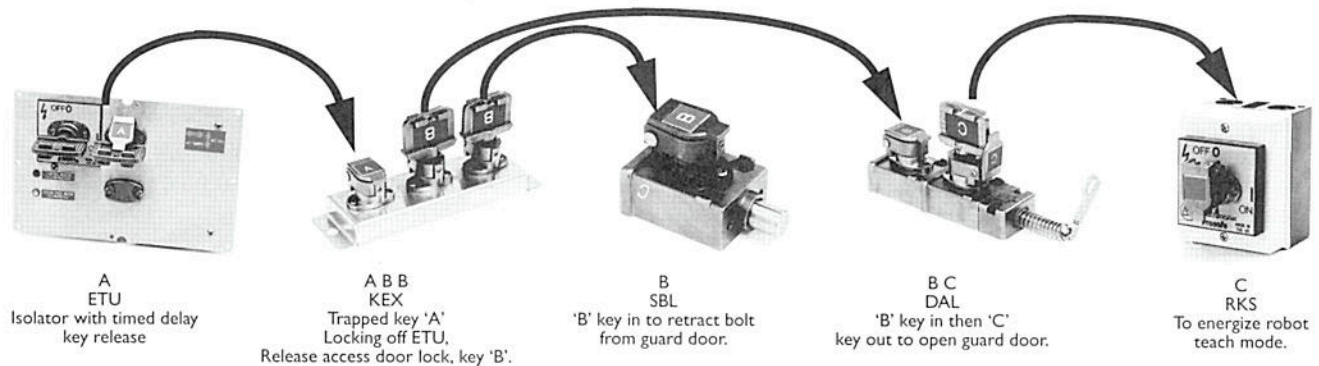


Illustrated Principles of Trapped Key Interlocking



Sequence of Operation

1. The ETU isolator has two keys. One is a non removable key. The other key (a 'A' coded key) can be removed after a timed duration, which is set by a potentiometer inside the ETU isolator. Turn the non removable key to turn the hazardous machine motion off and start the timer. When the time expires, the Key Free LED 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 traps the 'A' key in the KEX and prevents 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 prevents 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. Rotate the access handle to allow full body entry into the hazard zone.
8. Take the 'C' key into the hazard zone, insert it into the rotary key switch (RKS) and turn it 90° to send a signal to the machine control system, to allow the machine to operate in a slow or teach mode.
9. Reverse the process to return the machine to full operational mode.

Bill of Materials

Item	Quantity	Description	Catalogue Number
1	1	Single Key Time Delayed with an B Primary Key	440T-MSTUEI10A
2	1	Key Exchange Unit, A Primary Key, Two B Secondary Keys Trapped (included)	440T-MKEXEI10A0B0B
3	1	Single Bolt Lock, B Primary Key	440T-MSBLEI00B
4	1	Dual Access Lock, B Primary Key, C Secondary Key Trapped (included)	440T-MDALEI00B0C
5	1	Rotary Key Switch, C Primary Code Barrel	440T-MRKSEI00C
6	1	A Key	440T-AKEYEI00A

Note: Primary keys must be ordered separately, when not provided for by a previous sequential trapped key.

In the example above, only one primary key must be ordered separately. The remaining primary keys are provided by a previous sequential secondary (trapped) key.

Prosafe Trapped Key Interlock Switches

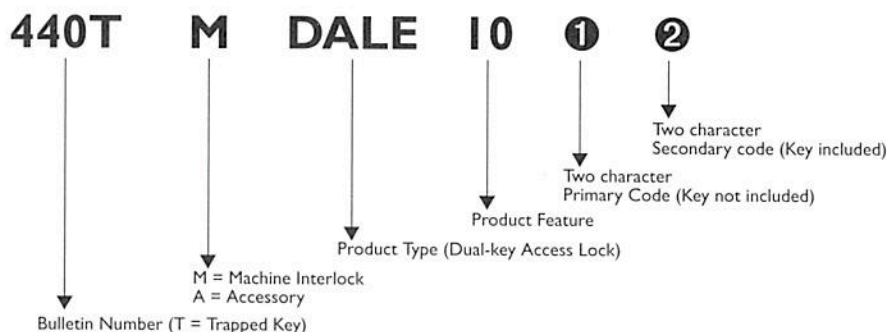
Overview

Code Selection

Ordering Prosafe trapped key products requires codes to be included in the catalogue number.

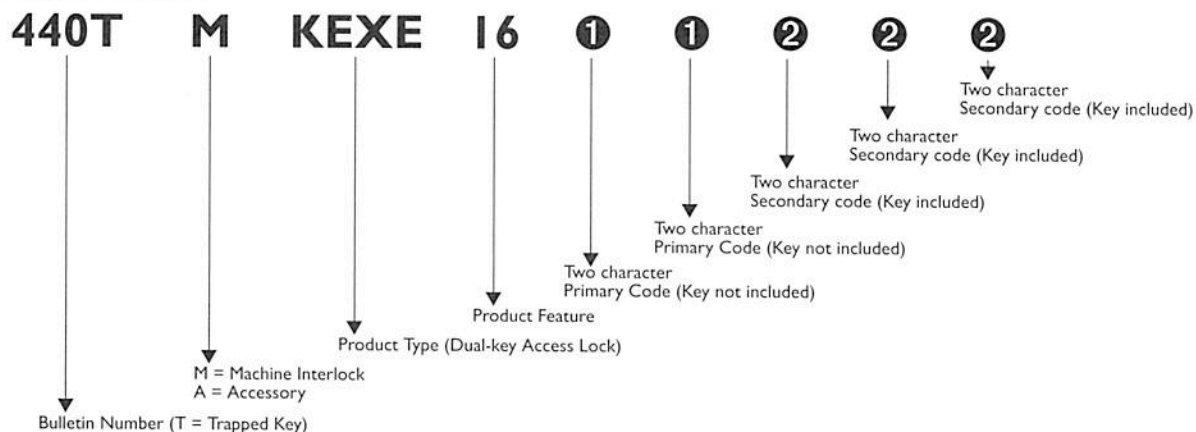
- The codes are added to the end of the catalogue number.
- Each code must be two characters in length.
- Single letter codes must be preceded by a 0 (zero).
- The first code(s) is the primary code and the last code(s), if necessary, are the secondary code(s).
- Primary codes do not include the key. The key must be ordered separately or must come from a previous operation.
- Secondary codes come complete with a key, as the key is trapped in the code barrel.
- Use the table on page 5-7 to select and track codes.

Ordering Example 1:



Order catalogue number 440TMDALEI00A0B to get a Dual key Access Lock with an "A" primary code and a "B" secondary code, with a "B" key included.

Ordering Example #2:



Order catalogue number 440TMKEXEI60A0B0C0C0C to get a key exchange unit with "A" and "B" primary codes and three "C" secondary codes. The "A" and "B" keys are not included. The three "C" keys, which are trapped in the secondary code barrels, are included.

5-Prosafetm Trapped
Key Interlock Switches

The Prosafe Advantage



Stainless steel
construction.

Key Coding

Below is an example reference guide that is useful in selecting and tracking codes. Start down the 0A column as the lower codes (typically 0A to ZA) are stocked. The chart continues on to ZZ. Note that there only 25 letters used—Q is not used.

Codes are ordered with upper case letters. Labels with two letter codes will show the first letter in upper case and the second letter in lower case.

	Code	Application & Date	Code	Application & Date	Code	Appli & Da
Start Down	0A	granulator machine #472 24/3/01 line 67	Aa		Ab	
	0B		Ba		Bb	
	0C		Ca		Cb	
	0D		Da		Db	

	Code	Application & date	Code	Application & date	Code	Application & date	Code	Application & date	Code	Application & date	Code	Application & date	Code	Application & date
<div>Start Down</div> <div>▼</div>	0A		Aa		Ab		Ac		Ad		Ae		Af	
	0B		Ba		Bb		Bc		Bd		Be		Bf	
	0C		Ca		Cb		Cc		Cd		Ce		Cf	
	0D		Da		Db		Dc		Dd		De		Df	
	0E		Ea		Eb		Ec		Ed		Ee		Ef	
	0F		Fa		Fb		Fc		Fd		Fe		Ff	
	0G		Ga		Gb		Gc		Gd		Ge		Gf	
	0H		Ha		Hb		Hc		Hd		He		Hf	
	0I		Ia		Ib		Ic		Id		Ie		If	
	0J		Ja		Jb		Jc		Jd		Je		Jf	
	0K		Ka		Kb		Kc		Kd		Ke		Kf	
	0L		La		Lb		Lc		Ld		Le		Lf	
	0M		Ma		Mb		Mc		Md		Me		Mf	
	0N		Na		Nb		Nc		Nd		Ne		Nf	
	0O		Oa		Ob		Oc		Od		Oe		Of	
	0P		Pa		Pb		Pc		Pd		Pe		Pf	
	0R		Ra		Rb		Rc		Rd		Re		Rf	
	0S		Sa		Sb		Sc		Sd		Se		Sf	
	0T		Ta		Tb		Tc		Td		Te		Tf	
	0U		Ua		Ub		Uc		Ud		Ue		Uf	
	0V		Va		Vb		Vc		Vd		Ve		Vf	
	0W		Wa		Wb		Wc		Wd		We		Wf	
	0X		Xa		Xb		Xc		Xd		Xe		Xf	
	0Y		Ya		Yb		Yc		Yd		Ye		Yf	
	0Z		Za		Zb		Zc		Zd		Ze		Zf	