

Universal Gate Box with RFID: UGB2-KLT, UGB4-KLT

FEATURES & APPLICATION:



Available as:
Die Cast metal painted red
or Stainless Steel 316.
4 Station model or
2 Station model.
Completely flexible - end user chooses buttons, lamps,
switches options for each station.

Application:

IDEM Universal Gate Boxes (UGB-KLT) provide high level RFID coded interlocking and machine control functions in one heavy duty housing. They can be easily fitted to access doors to provide guard locking, rear escape options and sliding or rotary handles.

They reduce the risk of operators being trapped inside a guarded area.

The UGB-KLT housings will incorporate standard 22mm push buttons, lamps or switches which can be added to provide machine request or control functions all from one UGB-KLT housing.

Features:

- Robust Safety Interlock switches with RFID and multifunction control features built into one housing.
- 2 or 4 station housing for incorporating wide choice of standard 22mm push buttons, lamps or switches.
- Optional sliding handle actuators or rotary handle actuators.
- Rear escape release options.
- Rotary one way rear escape handle (cannot be re-closed from inside the hazardous area).
- The built-in KLT switch has both anti-tamper RFID coding technology and standard mechanical interlock technology.
- 24Vdc solenoid to release lock.
- Built-in LED diagnostics of switch status and easy to read label legends.
- Easy to mount painted die-cast or Stainless Steel 316 housings.
- Holds guards closed and locked up to 3000N.
- Can be padlocked off for safe working.

TECHNICAL SPECIFICATIONS:

Standards:	ISO14119 EN60947-5-1 EN60204-1 EN62601 ISO13849-1 UL 60947-5-1
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Safety Classification and Reliability Data:

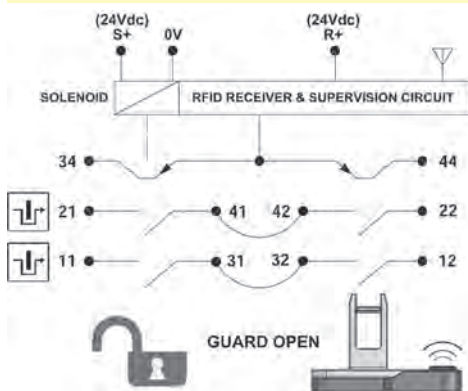
Mechanical Reliability B10d	2.5 x 10 ⁶ operations at 100mA load
ISO13849-1	Up to PLE depending upon system architecture
EN62061	Up to SIL3 depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days
PFHd	4.77 x 10 ⁻¹⁰
Proof Test Interval (Life)	20 years
MTTFd	1100a

Technical Specification:

KLT-SS-RFID Supply/Solenoid Voltage	24V dc
Solenoid Wattage	9W
Rated Insulation/Withstand Voltages	600Vac/2500Vac
Travel for Positive Opening	10mm
Maximum Approach/Withdrawal Speed	600mm/s
Holding Force	F1Max 3000N Fzh 2307N
Body Material	Die-cast painted red or Stainless Steel 316
Head Material	Polished Stainless Steel 316
Enclosure Protection	IP65
Operating Temperature	-25C +40C
Vibration	IEC 68-2-6 10-55Hz + 1Hz Excursion 0.35mm 1 octave/min
Conduit Entry	M20
Fixing	4 x M5



KLT INTERNAL CONNECTIONS:



For all IDEM switches the normally closed (NC) circuits are closed when the guard is closed actuator inserted.

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UGB-KLT GATEBOX SOLUTION:

All-in-one control and safety interlocking with RFID coding.



PROBLEM:

A traditional control installation requires several external components and housings for switches, push buttons, lamps, etc. All of these external components require individual mounting brackets and also require several conduit/cable runs.

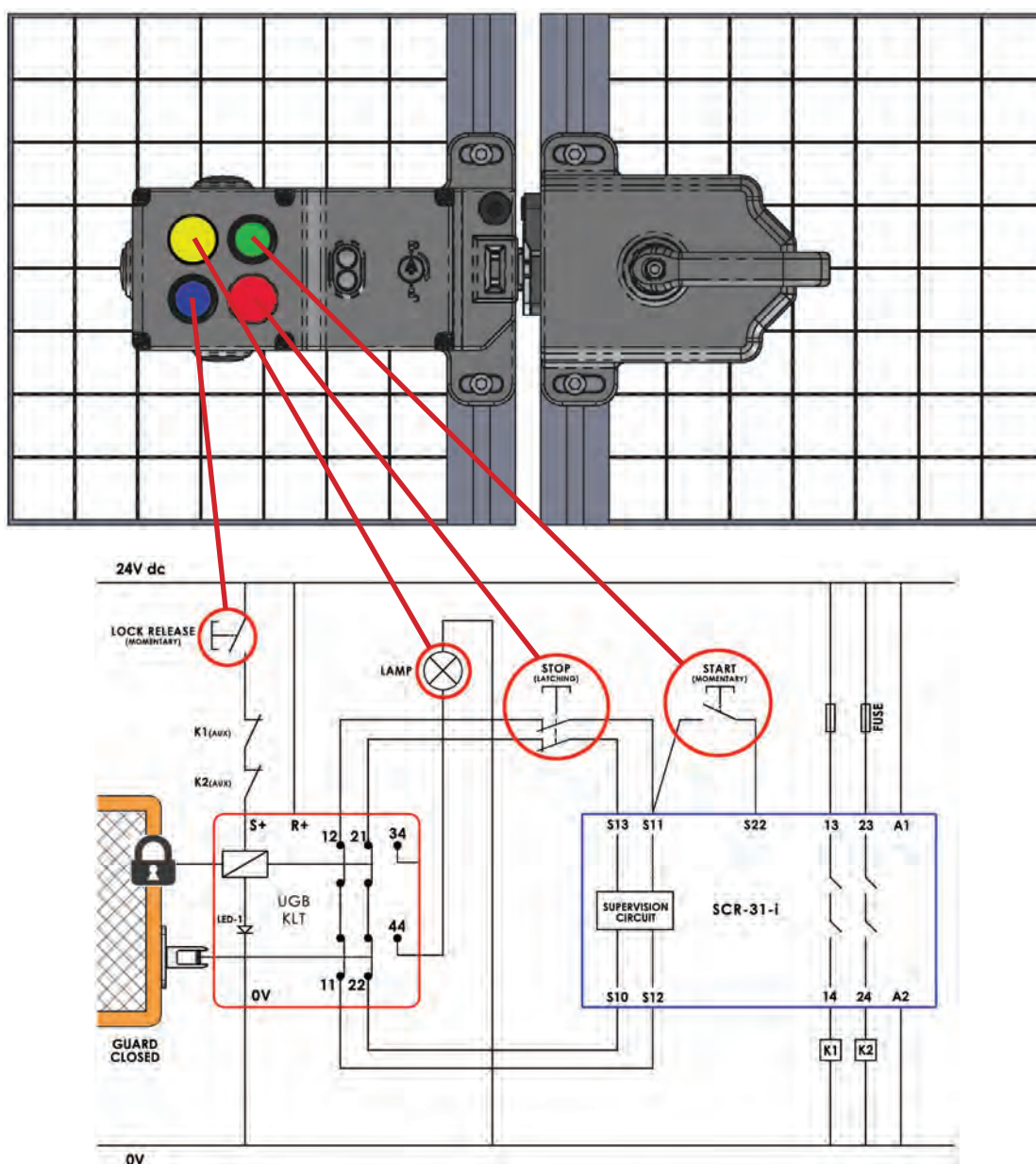
THE SOLUTION: UGB-KLT GATEBOX

Only 4 mounting bolts, options for sliding or rotary handles, emergency release options and can use only one conduit exit for wiring.

Up to 4 x 22mm pushbuttons, switches or lamps can be fitted integrally.

RFID interlocking with LED diagnostics provides high functional safety interlocking.

Holds guards closed and locked up to 3000N.



SCHEMATIC EXAMPLE:

UGB-KLT fitted with integral LATCHING STOP, STATUS PILOT LAMP, START and LOCK RELEASE buttons.

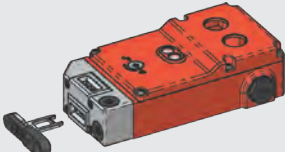
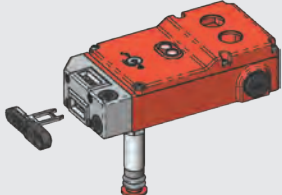
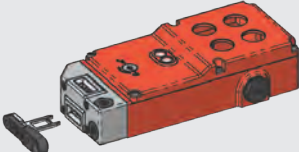
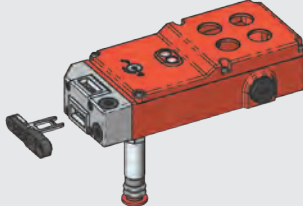
Connected to a safety relay to give up to PLe/ Cat 4.

Universal Gate Box with RFID: UGB2-KLT, UGB4-KLT

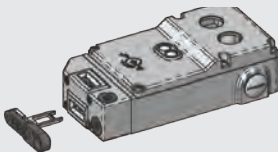
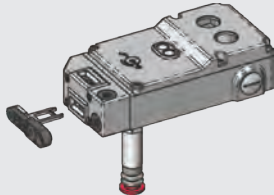
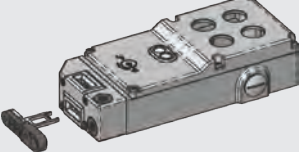
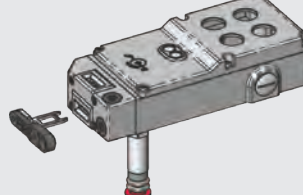
GATE BOX SWITCHES & ACTUATORS SALES NUMBERS:

Note: ALL Universal Gate Boxes are supplied complete with RFID coded tongue actuator. These can fitted directly where no rear escape or rotary handles are preferred.

DIE CAST:

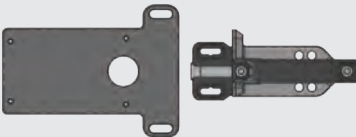
			
TYPE: UGB2-KLTM-RFID	TYPE: UGB2-KLTM-RFID-RR	TYPE: UGB4-KLTM-RFID	TYPE: UGB4-KLTM-RFID-RR
Universal Gate Box (2 Station)	Universal Gate Box (2 Station) with Rear Release	Universal Gate Box (4 Station)	Universal Gate Box (4 Station) with Rear Release
24V Solenoid M20 Conduit	24V Solenoid M20 Conduit	24V Solenoid M20 Conduit	24V Solenoid M20 Conduit
SALES NUMBER (Manual Override)	SALES NUMBER (Manual Override)	SALES NUMBER (Manual Override)	SALES NUMBER (Manual Override)
525001	525002	526001	526002
SALES NUMBER (No Manual Override)	SALES NUMBER (No Manual Override)	SALES NUMBER (No Manual Override)	SALES NUMBER (No Manual Override)
525003	525004	526003	526004

STAINLESS STEEL:

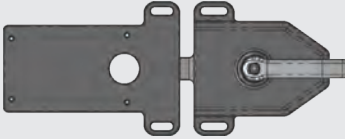
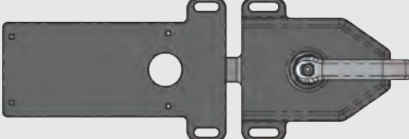
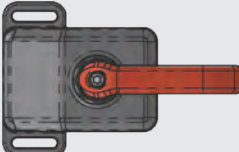
			
TYPE: UGB2-KLT-SS-RFID	TYPE: UGB2-KLT-SS-RFID-RR	TYPE: UGB4-KLT-SS-RFID	TYPE: UGB4-KLT-SS-RFID-RR
Universal Gate Box (2 Station)	Universal Gate Box (2 Station) with Rear Release	Universal Gate Box (4 Station)	Universal Gate Box (4 Station) with Rear Release
24V Solenoid M20 Conduit	24V Solenoid M20 Conduit	24V Solenoid M20 Conduit	24V Solenoid M20 Conduit
SALES NUMBER (Manual Override)	SALES NUMBER (Manual Override)	SALES NUMBER (Manual Override)	SALES NUMBER (Manual Override)
520001	520002	521001	521002
SALES NUMBER (No Manual Override)	SALES NUMBER (No Manual Override)	SALES NUMBER (No Manual Override)	SALES NUMBER (No Manual Override)
520003	520004	521003	521004

IMPORTANT NOTE: Order 22mm accessories (Switches, Lamps, Push Buttons) separately - please see next page.

ACCESSORIES FOR ENHANCED FUNCTIONS OF SLIDING FRONT/REAR HANDLES:

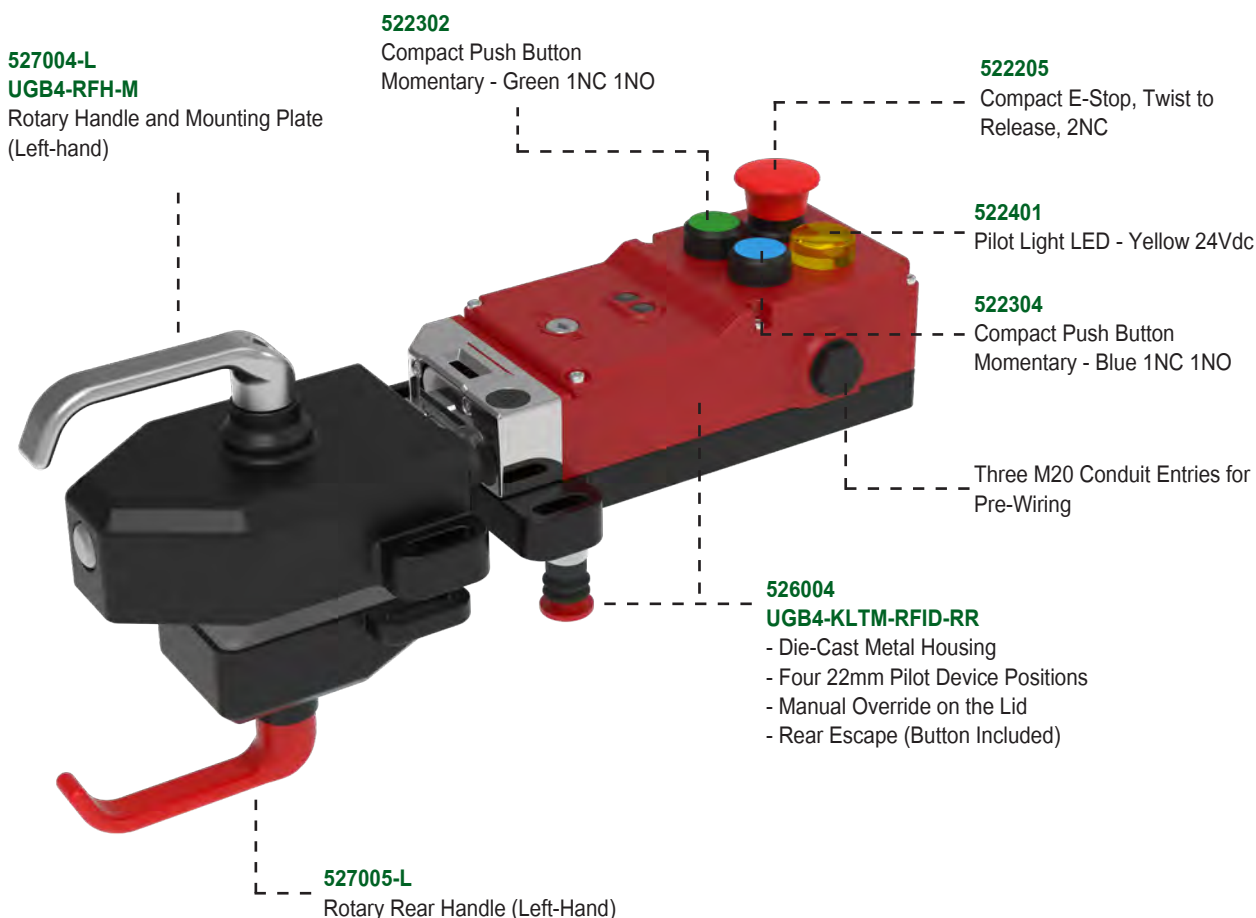
			
UGB2 Sliding Front Handle and Mounting Plate	UGB4 Sliding Front Handle and Mounting Plate	Rear Sliding Handle (for use with RR versions and Sliding Front Handles)	Optional Spring Catch to prevent accidental re-closing of Sliding Front Handles
SALES NUMBERS	SALES NUMBERS	SALES NUMBERS	SALES NUMBERS
UGB2-SFH-M (Die-Cast)	UGB4-SFH-M (Die Cast)	REAR HANDLE (Die Cast)	SPRING CATCH (Die Cast)
527001	527002	210005	210006
UGB2-SFH-SS (Stainless Steel)	UGB4-SFH-SS (Stainless Steel)	REAR HANDLE (Stainless Steel)	SPRING CATCH (Stainless Steel)
522001	522002	211005	211006

ACCESSORIES FOR ROTARY FRONT HANDLES & REAR ROTARY ESCAPE HANDLES:

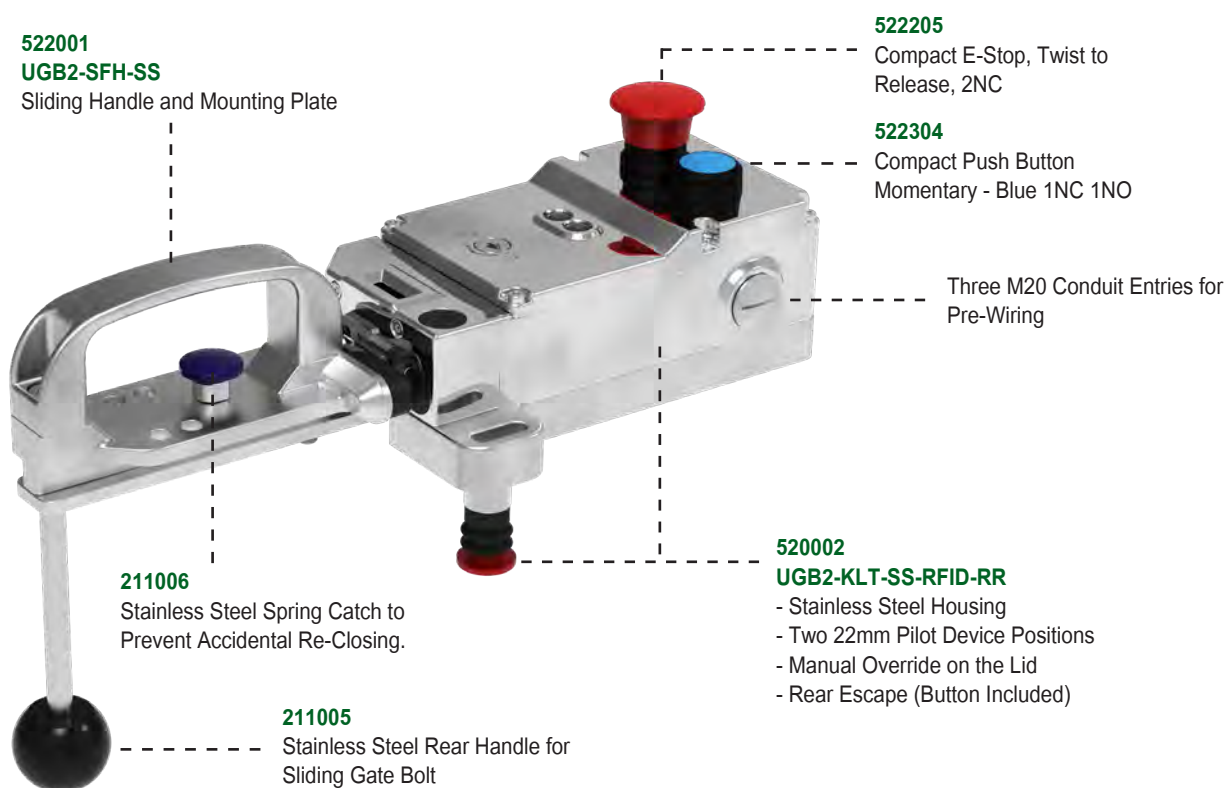
		
Rotary Front Handle and Mounting Plate	Rotary Front Handle and Mounting Plate	Rear Escape Rotary Handle (Optional)
SALES NUMBERS	SALES NUMBERS	SALES NUMBERS
UGB2-RFH-M (Die Cast)	UGB4-RFH-M (Die Cast)	UGB-RERH-M (Die Cast)
527003-L / 527003-R	527004-L / 527004-R	527005-L / 527005-R
UGB2-RFH-SS (Stainless Steel)	UGB4-RFH-SS (Stainless Steel)	UGB-RERH-SS (Stainless Steel)
522003-L / 522003-R	522004-L / 522004-R	522005-L / 522005-R

Universal Gate Box with RFID: UGB2-KLT, UGB4-KLT

EXAMPLE 1:



EXAMPLE 2:

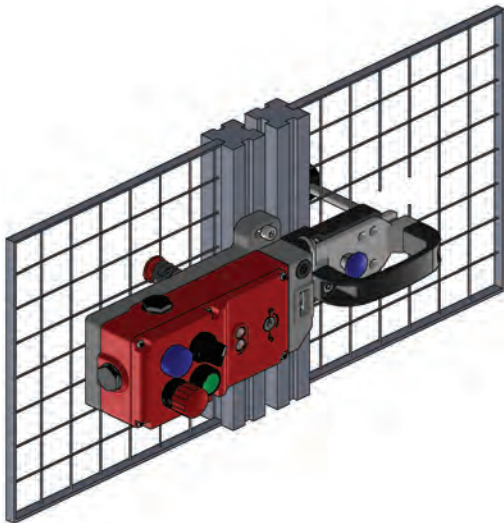


Universal Gate Box with RFID: UGB4-KLT

APPLICATION EXAMPLE:

4 STATION (UGB4) with Front Sliding Handle, Rear Escape Button and Rear Escape Sliding Handle.
Fitted with Spring Loaded Catch (optional) – to prevent accidental closing after opening of the guard.

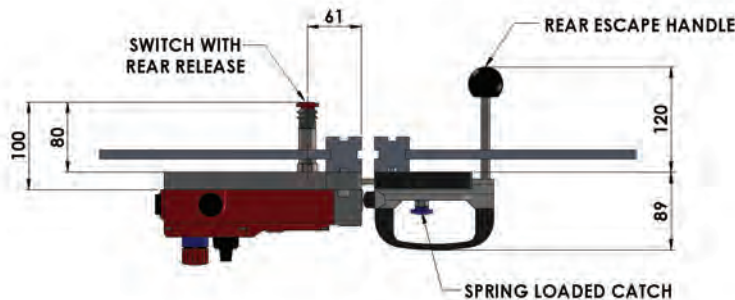
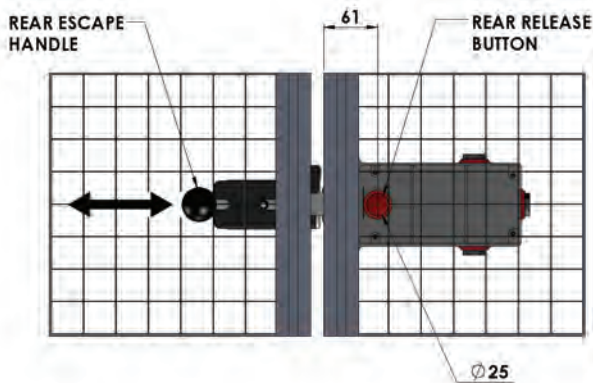
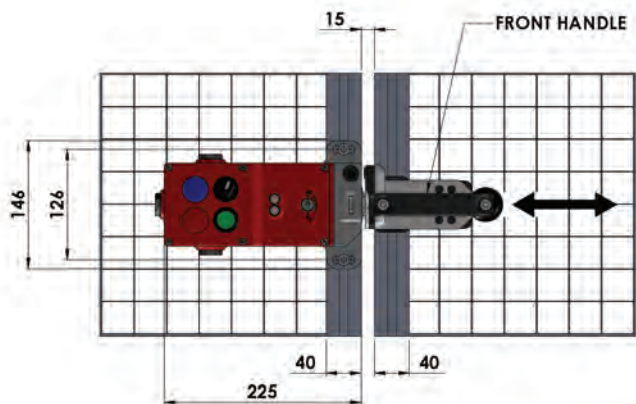
VIEWED FROM OUTSIDE GUARDED AREA



VIEWED FROM INSIDE GUARDED AREA



PULL REAR ESCAPE SLIDING HANDLE



DESCRIPTION	SALES NUMBER
UGB4-KLTM-RFID-RR	
With LID Manual Override, or	526002
With NO Manual Override	526004
UGB4-SFH-M (Sliding Front Handle)	527002
Rear Release Handle (Stainless Steel)	210005
Spring Loaded Catch (Stainless Steel)	210006

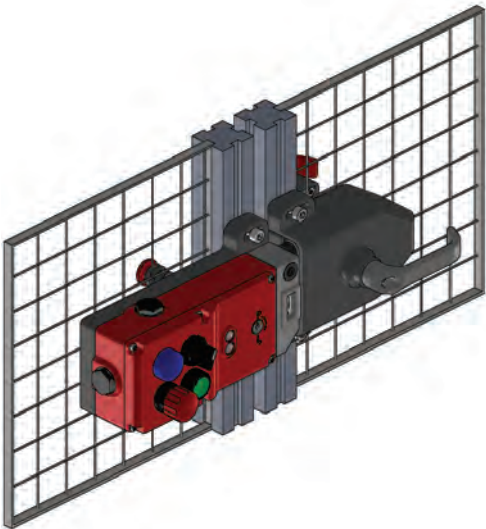
ORDER SEPARATELY:
22mm Push Buttons, Switches, Lamps - See P209.

Universal Gate Box with RFID: UGB4-KLT

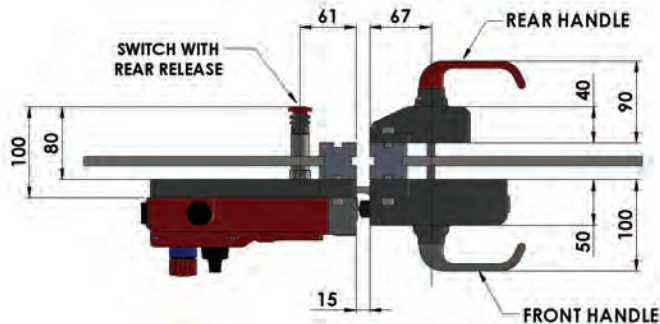
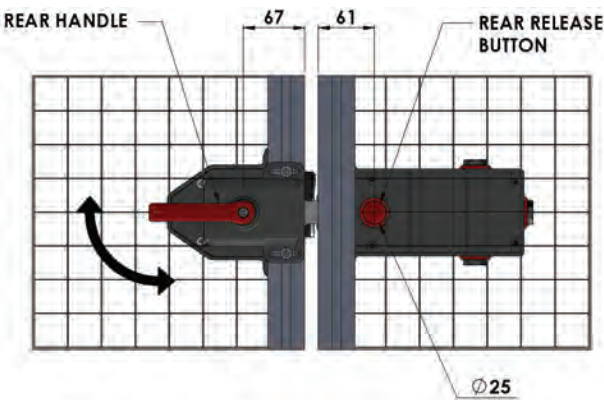
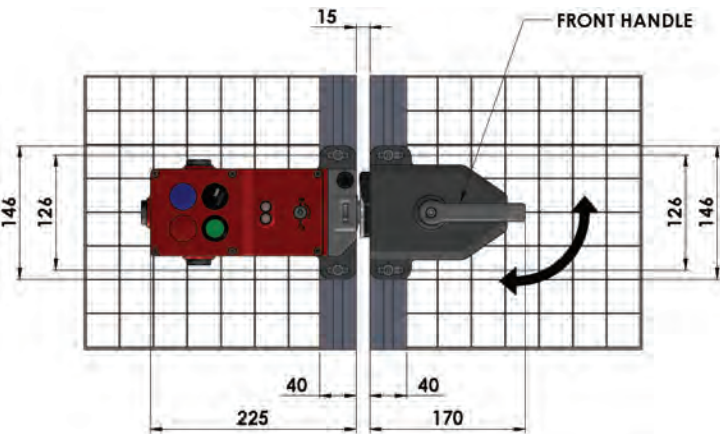
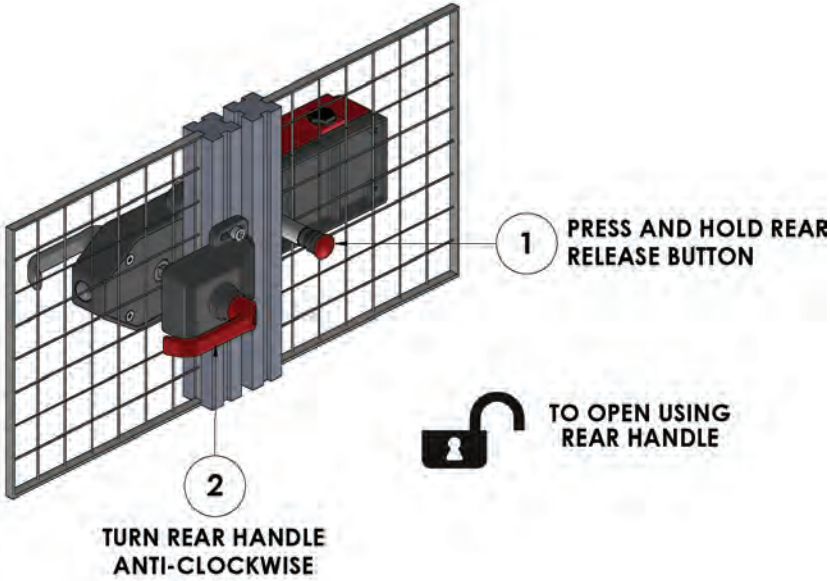
APPLICATION EXAMPLE:

4 STATION (UGB4) with Front Rotary Handle, Rear Escape Button and Rear Escape Rotary Handle.

VIEWED FROM OUTSIDE GUARDED AREA



VIEWED FROM INSIDE GUARDED AREA



DESCRIPTION	SALES NUMBER
UGB4-KLTM-RFID-RR	
With LID Manual Override, or	526002
With NO Manual Override	526004
UGB4-RFH-M (Rotary Front Handle)	527004
UGB-RERH-M (Rear Escape Rotary Handle)	527005

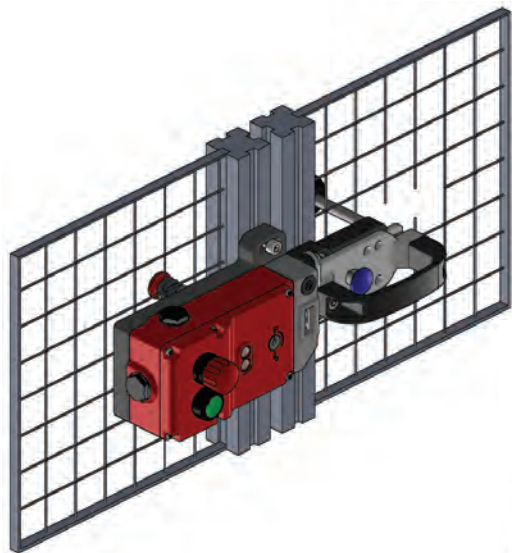
ORDER SEPARATELY:
22mm Push Buttons, Switches, Lamps - See P209.

Universal Gate Box with RFID: UGB2-KLT

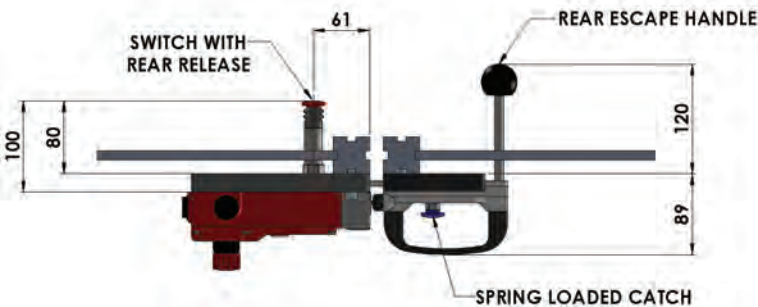
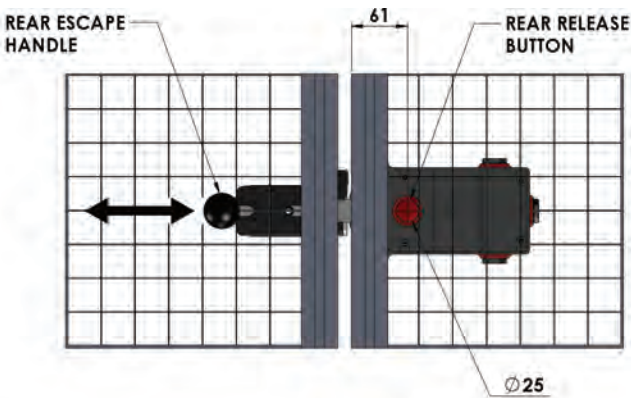
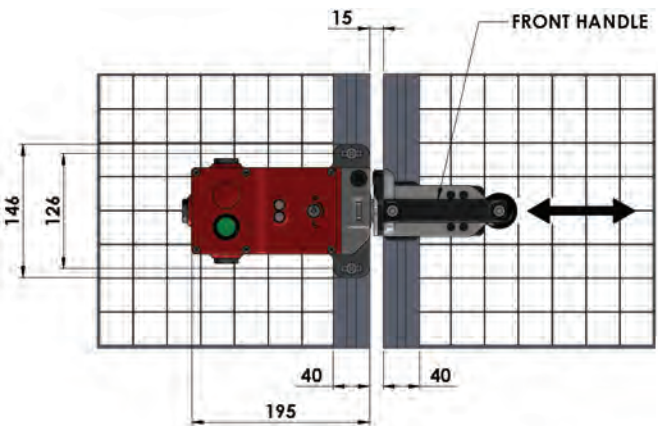
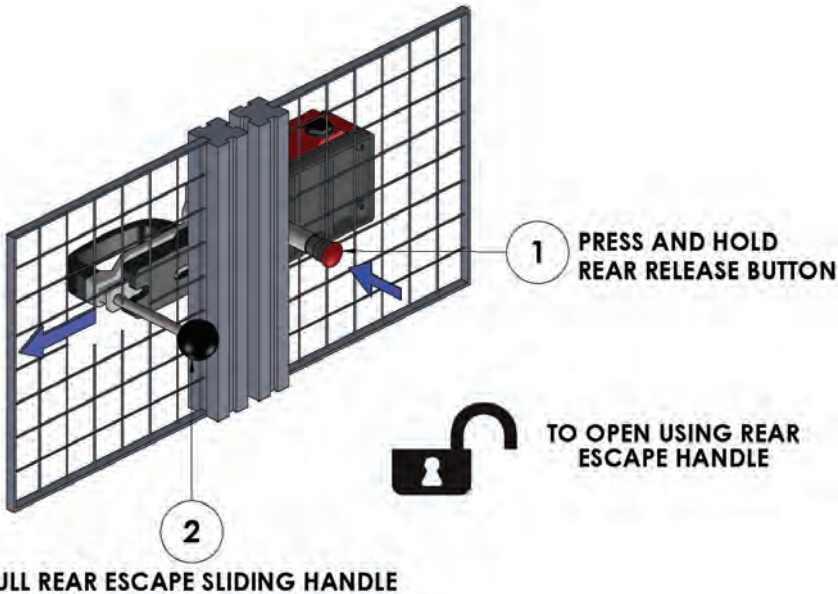
APPLICATION EXAMPLE:

2 STATION (UGB2) with Front Sliding Handle, Rear Escape Button and Rear Escape Sliding Handle.
Fitted with Spring Loaded Catch – to prevent accidental closing after opening of the guard (optional).

VIEWED FROM OUTSIDE GUARDED AREA



VIEWED FROM INSIDE GUARDED AREA



DESCRIPTION	SALES NUMBER
UGB2-KLTM-RFID-RR	
With LID Manual Override, or	525002
With NO Manual Override	525004
UGB2-SFH-M (Sliding Front Handle)	527001
Rear Release Handle (Stainless Steel)	210005
Spring Loaded Catch (Stainless Steel)	210006

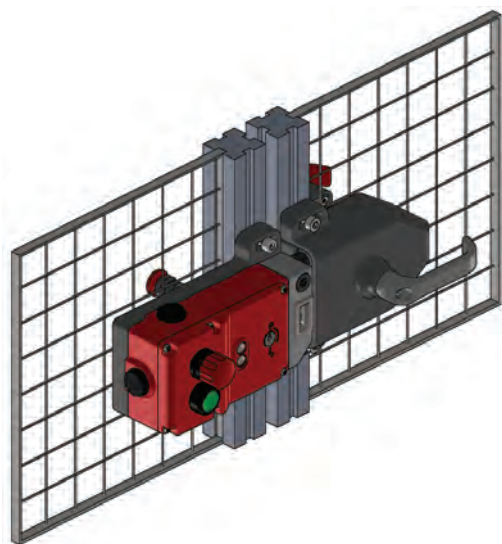
ORDER SEPARATELY:
22mm Push Buttons, Switches, Lamps - See P209.

Universal Gate Box with RFID: UGB2-KLT

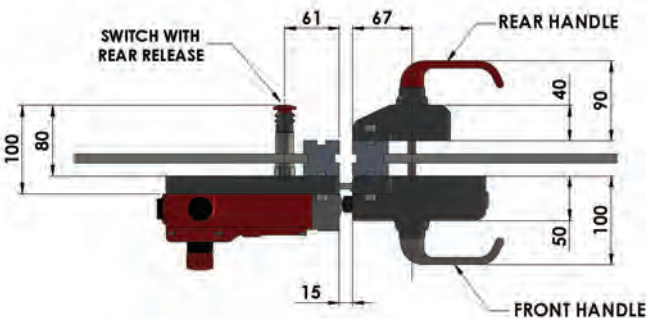
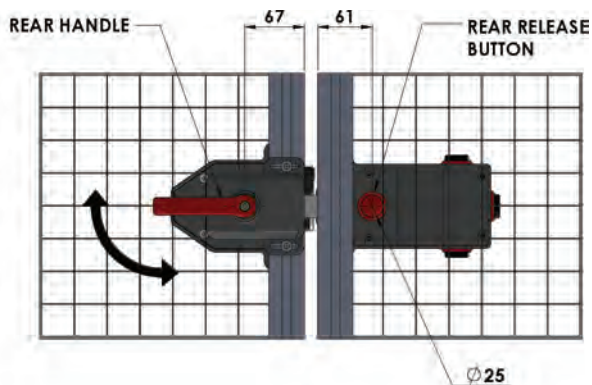
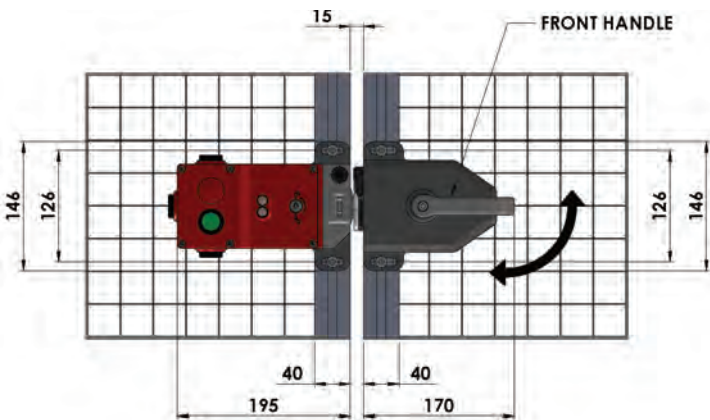
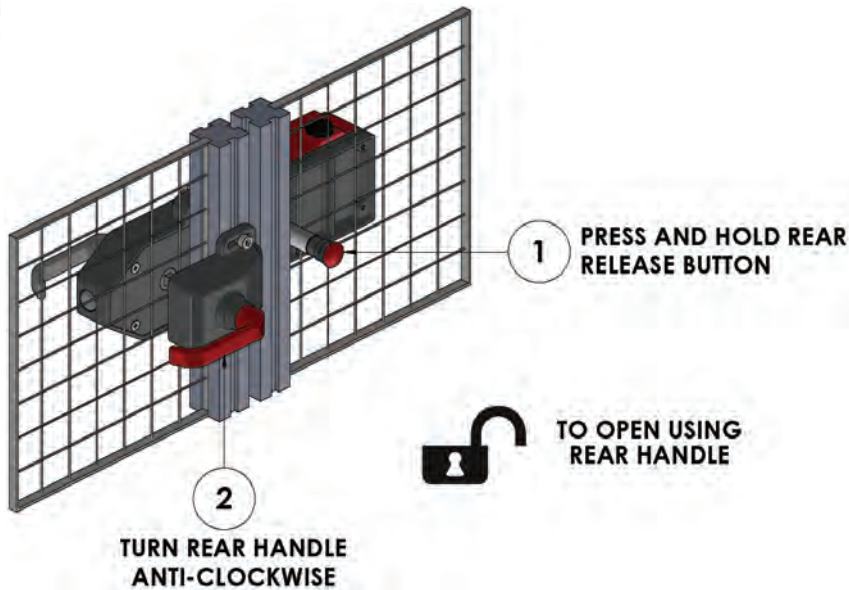
APPLICATION EXAMPLE:

2 STATION (UGB2) with Front Rotary Handle, Rear Escape Button and Rear Escape Rotary Handle.

VIEWED FROM OUTSIDE GUARDED AREA



VIEWED FROM INSIDE GUARDED AREA



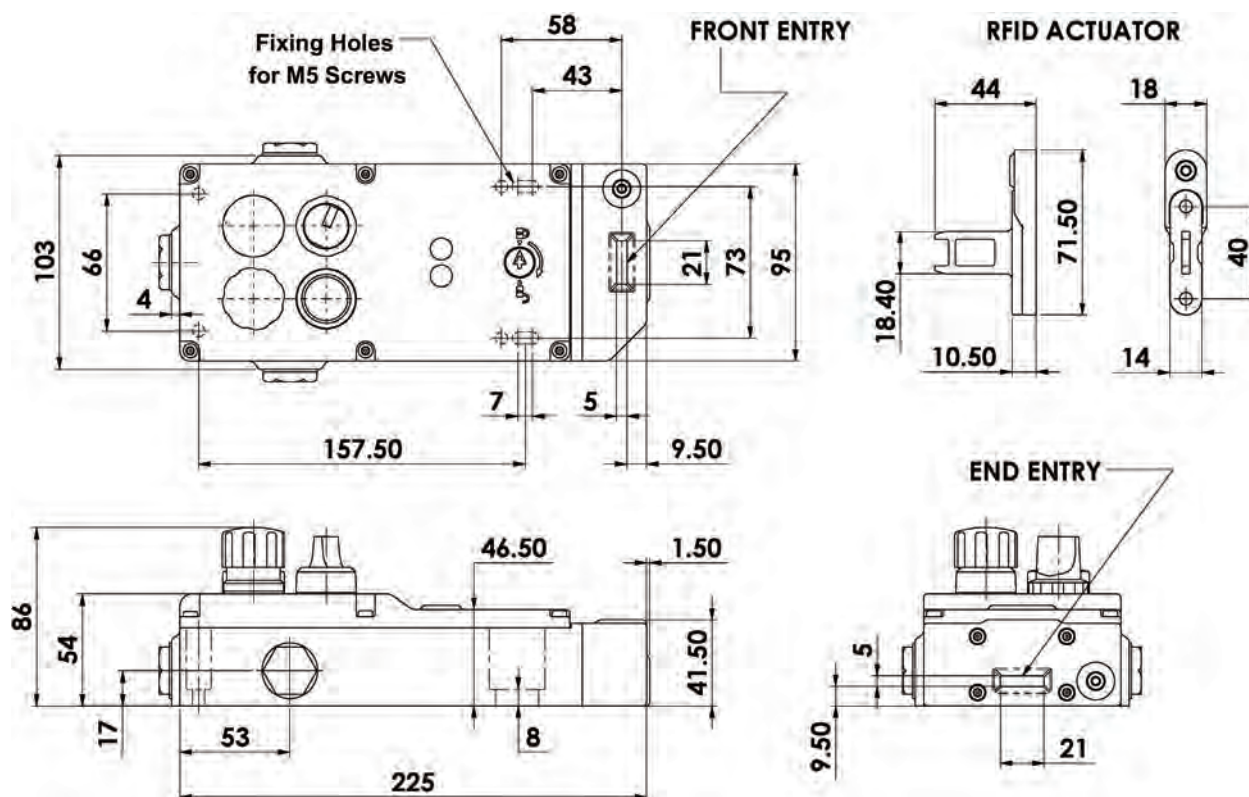
DESCRIPTION	SALES NUMBER
UGB2-KLTM-RFID-RR	
With LID Manual Override, or	525002
With NO Manual Override	525004
UGB2-RFH-M (Rotary Front Handle)	527003
UGB-RERH-M (Rear Escape Rotary Handle)	527005

ORDER SEPARATELY:
22mm Push Buttons, Switches, Lamps - See P209.

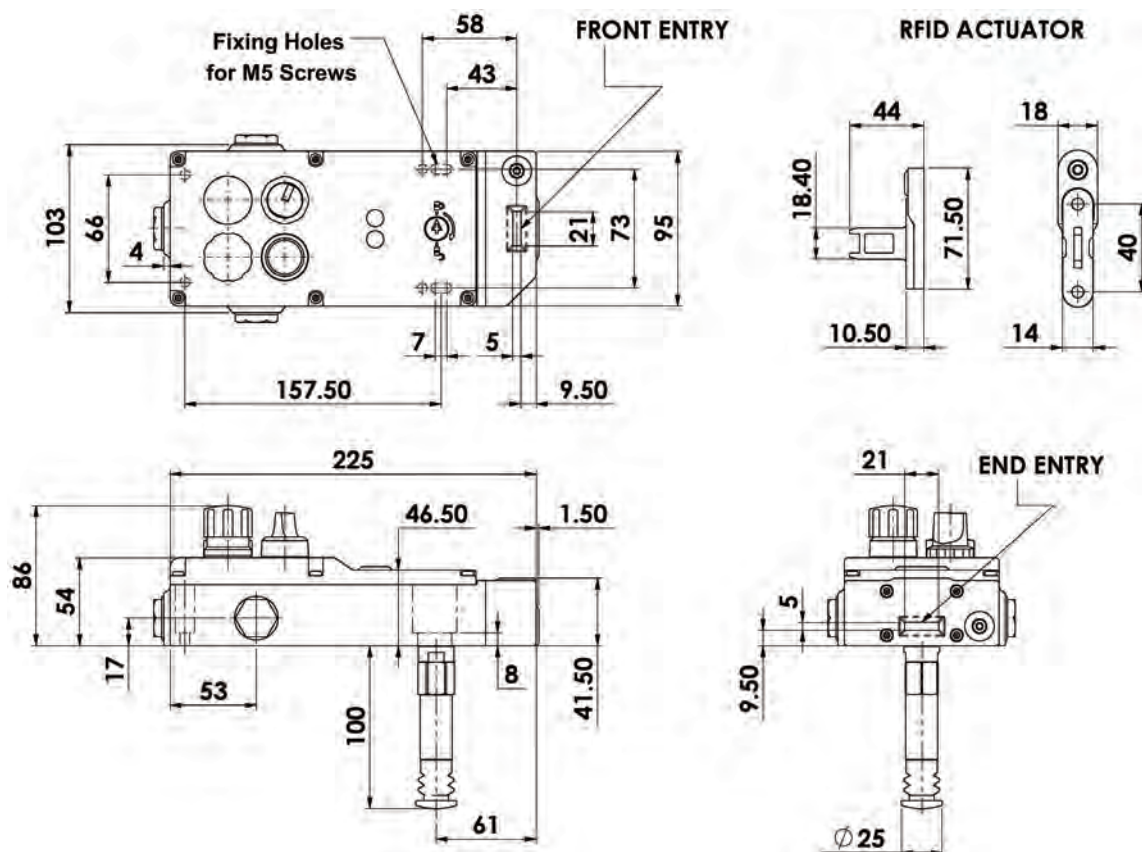
Universal Gate Box with RFID: UGB2-KLT, UGB4-KLT

PRODUCT DIMENSIONS:

TYPE: UGB 4-KLTM-RFID



TYPE: UGB 4-KLTM-RFID-RR (Rear Release)

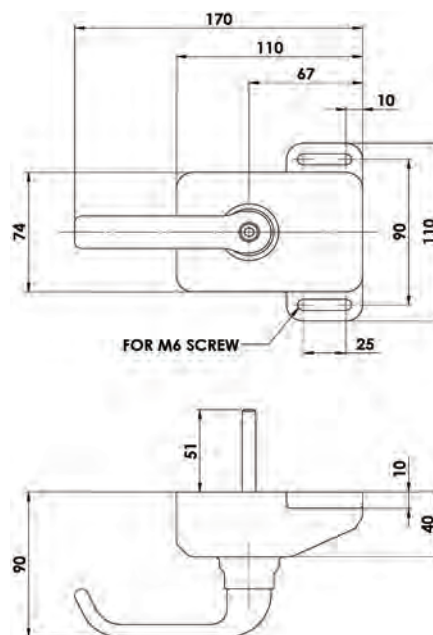


GATE SOLUTIONS - SAFETY INTERLOCKS WITH GUARD LOCKING

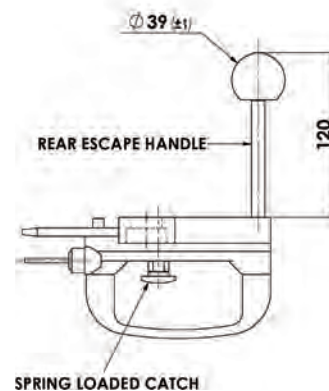
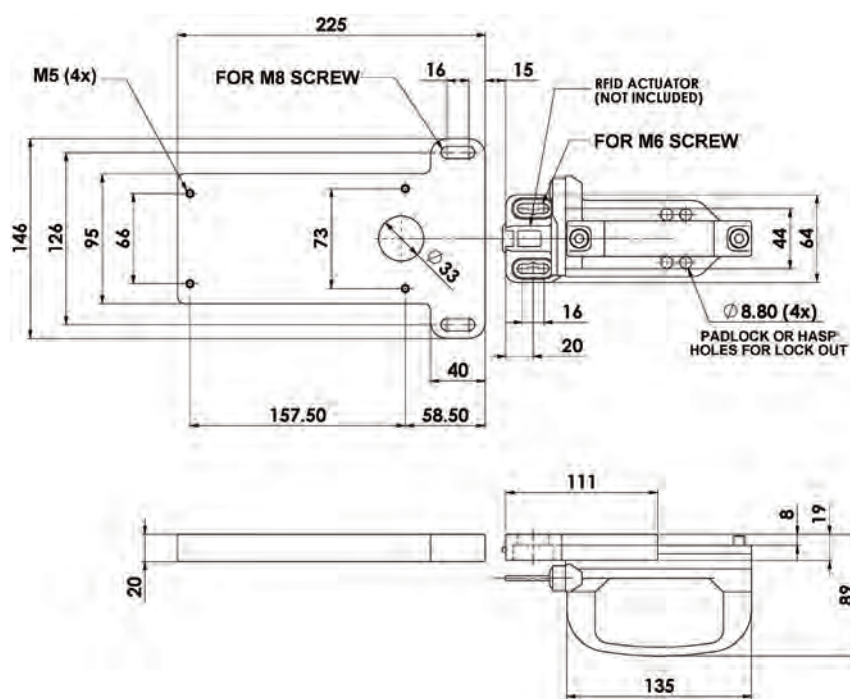
www.idemsafety.com

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TYPE : UGB-ROTARY REAR HANDLE



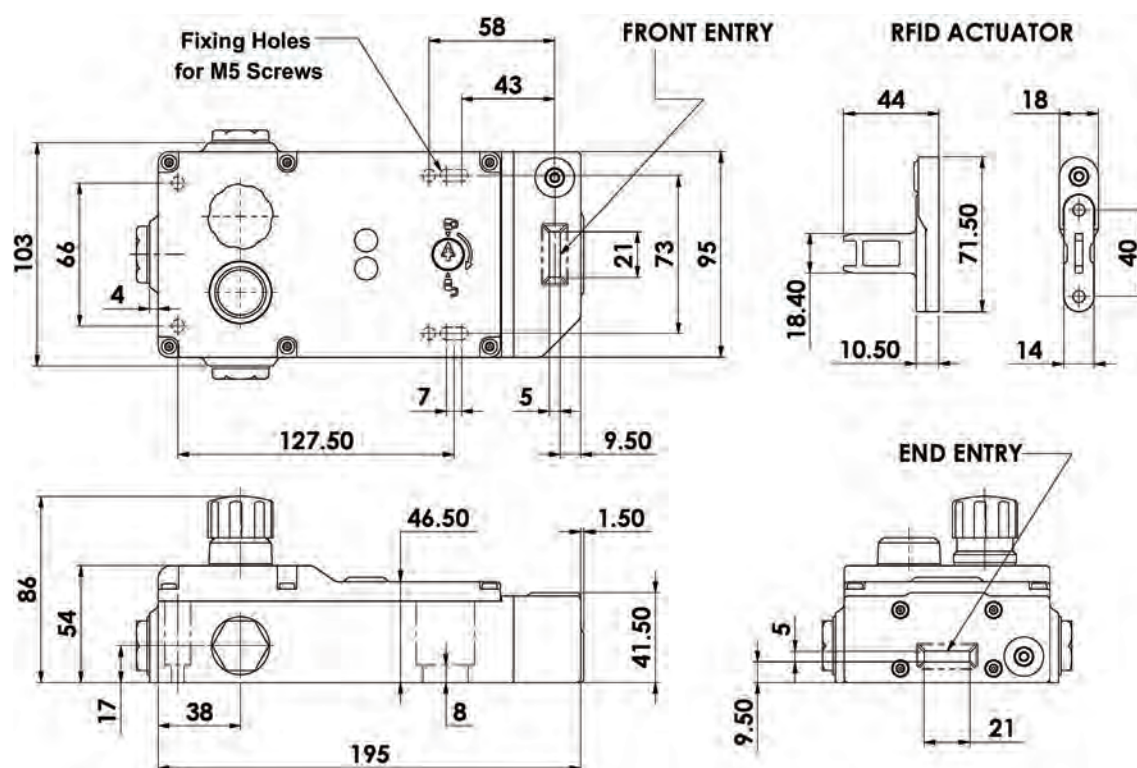
TYPE : UGB 4 SLIDING HANDLE (4 x APP)



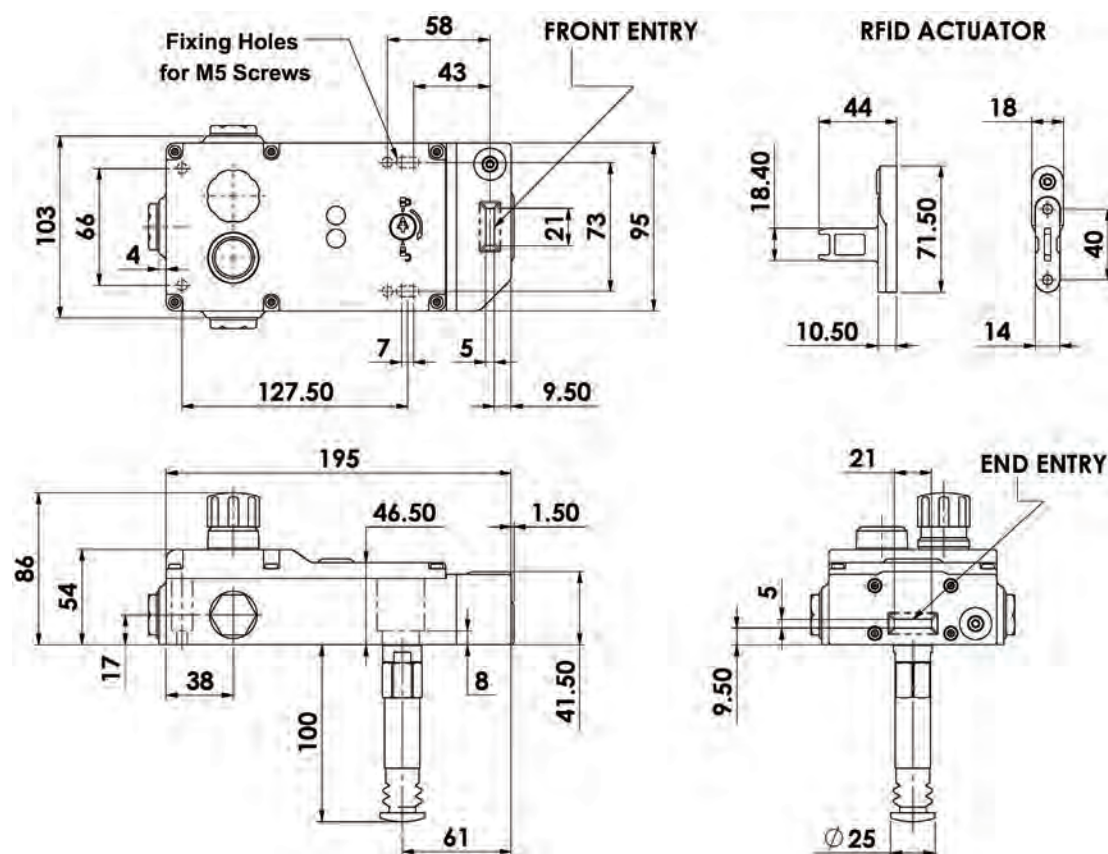
Universal Gate Box with RFID: UGB2-KLT, UGB4-KLT

PRODUCT DIMENSIONS:

TYPE: UGB 2-KLTM-RFID



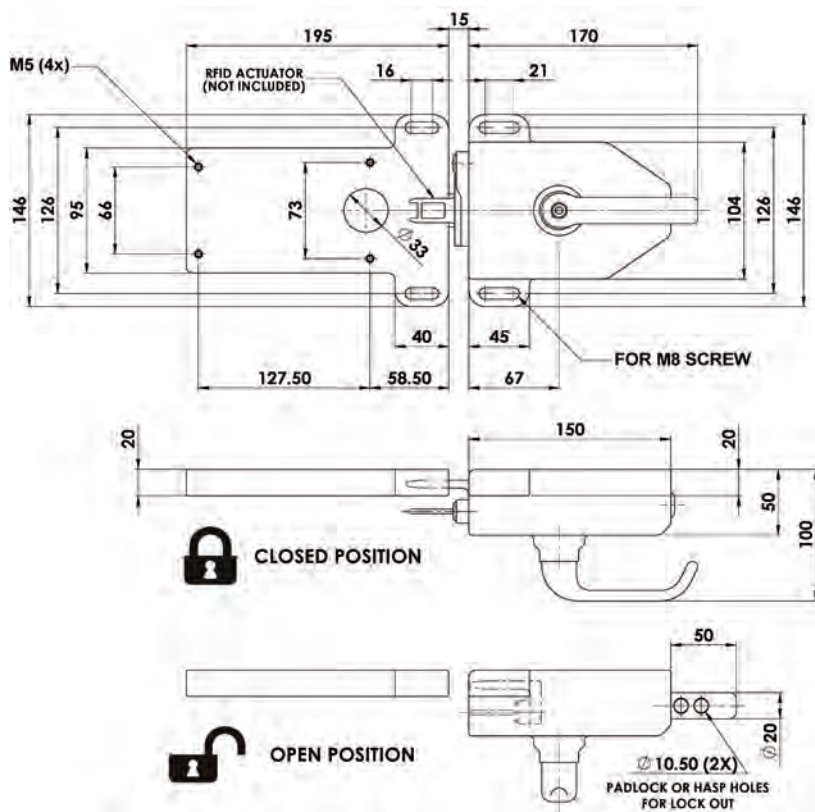
TYPE: UGB 2-KLTM-RFID-RR (Rear Release)



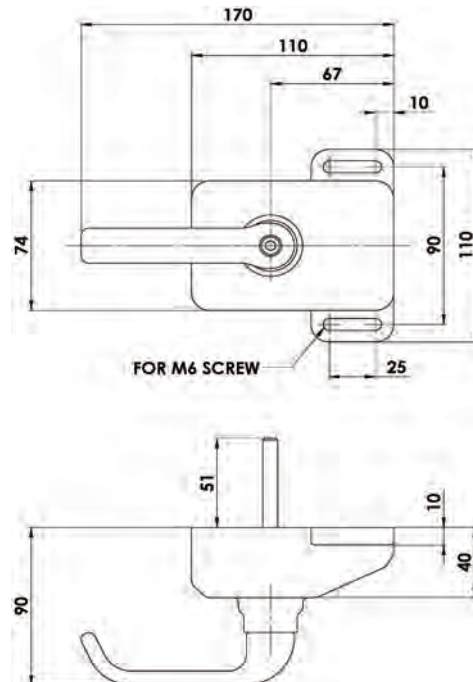
Universal Gate Box with RFID: UGB2-KLT, UGB4-KLT

PRODUCT DIMENSIONS:

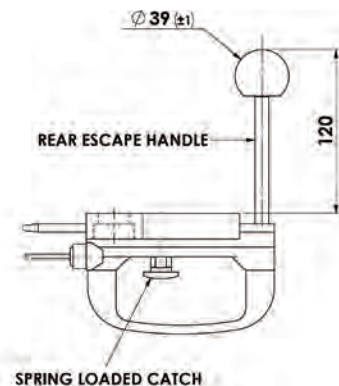
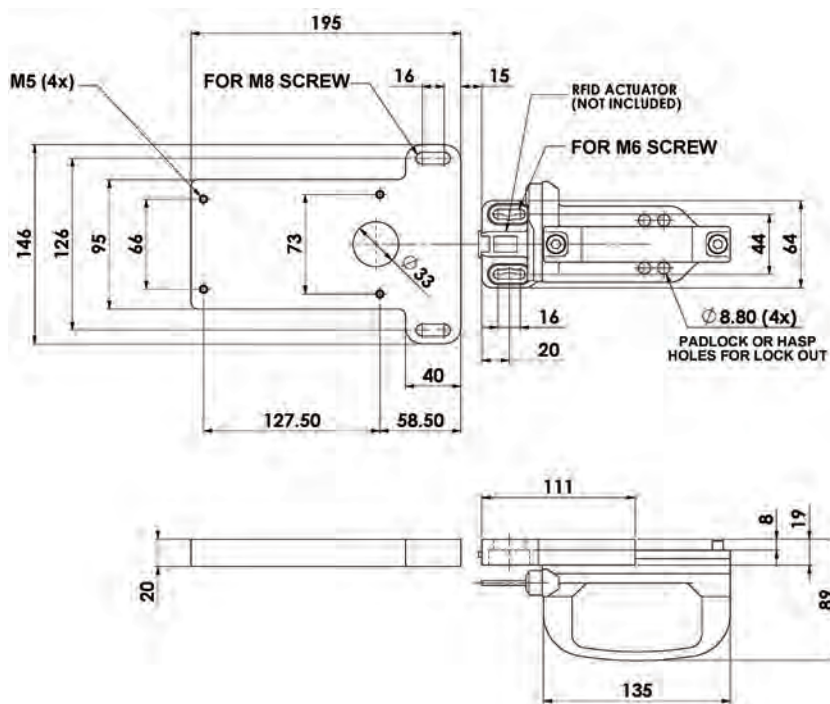
TYPE : UGB 2- ROTARY HANDLE (2 x APP)



TYPE : UGB-ROTARY REAR HANDLE



TYPE : UGB 2 SLIDING HANDLE (2 x APP)



Pilot Devices for UGB-KLT and KLM-Z-ST Models

22mm ACCESSORIES FOR UGB-KLT, KLM-Z-4ST & 5ST (to be ordered separately):



SALES NUMBER	CONTACTS or VOLTAGE	DESCRIPTION	ELECTRICAL
522201	2NC	Compact Stop, Twist to Reset, Red 30mm Mushroom Head	AC-15 120Vac 1.5A 240Vac 1.0A DC-13 24Vdc 0.3A 125Vdc 0.2A
522202	1NC 1NO	Compact Stop, Twist to Reset, Red 30mm Mushroom Head	
522203	2NC	Compact Stop, Twist to Reset, Red 30mm Mushroom Head with Reset Key	
522204	1NC 1NO	Compact Stop, Twist to Reset, Red 30mm Mushroom Head with Reset Key	
522205	2NC	Compact Stop, Twist to Reset, Red 40mm Mushroom Head	
522206	1NC 1NO	Compact Stop, Twist to Reset, Red 40mm Mushroom Head	
522207	2NC	Compact Stop, Twist to Reset, Red 40mm Mushroom Head with Reset key	
522208	1NC 1NO	Compact Stop, Twist to Reset, Red 40mm Mushroom Head with Reset key	
522209	2NC	Compact Illuminated Stop, Twist to Reset, Red 32mm Mushroom Head with plug-in Spade Terminals (2.8 x 0.5mm), RED LAMP (5-30Vdc).	AC-15 120Vac 3A 24Vac 1.5A DC-13 24Vdc 3A 250Vdc 0.27A
522210	1NC 1NO	Compact Illuminated Stop, Twist to Reset, Red 32mm Mushroom Head with plug-in Spade Terminals (2.8 x 0.5mm), RED LAMP (5-30Vdc).	
522251	1NC 1NO	Compact 2 Positions Plastic Selector Switch	AC-15 120Vac 1.5A 240Vac 1.0A DC-13 24Vdc 0.3A 125Vdc 0.2A
522252	2NC	Compact 2 Positions Plastic Selector Switch	
522301	1NC 1NO	Compact Push Button Momentary - RED	
522302	1NC 1NO	Compact Push Button Momentary - GREEN	
522303	1NC 1NO	Compact Push Button Momentary - YELLOW	
522304	1NC 1NO	Compact Push Button Momentary - BLUE	
522305	1NC 1NO	Compact Push Button Momentary - WHITE	
522310	2NC	Compact Push Button Momentary - RED	
522311	2NC	Compact Push Button Momentary - GREEN	
522312	2NC	Compact Push Button Momentary - YELLOW	
522313	2NC	Compact Push Button Momentary - BLUE	
522314	2NC	Compact Push Button Momentary - WHITE	
522321	1NO	Compact Illuminated Push Button Momentary - RED (Lamp 24V ac/dc)	
522322	1NO	Compact Illuminated Push Button Momentary - GREEN (Lamp 24V ac/dc)	
522323	1NO	Compact Illuminated Push Button Momentary - YELLOW (Lamp 24V ac/dc)	
522324	1NO	Compact Illuminated Push Button Momentary - BLUE (Lamp 24V ac/dc)	
522325	1NO	Compact Illuminated Push Button Momentary - CLEAR (Lamp 24V ac/dc)	
522401	24V ac/dc	Pilot Light LED - YELLOW	24V ac/dc
522402	24V ac/dc	Pilot Light LED - RED	
522403	24V ac/dc	Pilot Light LED - GREEN	
522404	24V ac/dc	Pilot Light LED - BLUE	
522405	24V ac/dc	Pilot Light LED - CLEAR	
522451		Legend Holder for use with 22 mm Devices	
522452		Blanking Plug for sealing unused 22mm holes	