

UGB-NET Gate Box with Integrated Safety Protocols (CIP Safety/PROFIsafe)

FEATURES & APPLICATION:



UGB-NET-PROFIsafe

UGB-NET-CIP



Integrated safety protocols for use with industry recognised industrial Ethernet networking capabilities.

Ethernet/IP (CIP Safety) or PROFINET (PROFIsafe).

Application:

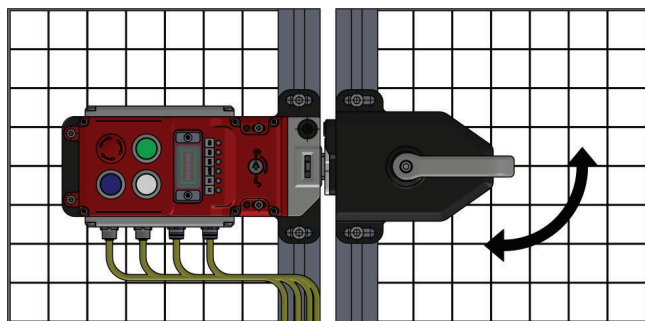
IDEM's Universal Gate Boxes (UGB-NET) provide high level RFID coded interlocking and machine control functions in one heavy duty housing. They can be easily fitted to access doors to provide guard locking, rear escape options and sliding or rotary handles. They reduce the risk of operators being trapped inside a guarded area.

They incorporate standard machine request or control buttons and indicator lamps in an all-in-one machine safety device.

Features:

- Choice of integrated Ethernet CIP Safety or PROFIsafe versions.
- Choice of pluggable connections for quick connection (M12 or 7/8")
- Network address assignment set by DIP switches for simple and easy set up.
- Compact housing – less than 250mm long (10 inches) and 115mm (4.5 inches).
- End or front actuator insertion for flexibility of mounting.
- Optional Rotary Front Handles and Rear Escape Handles.

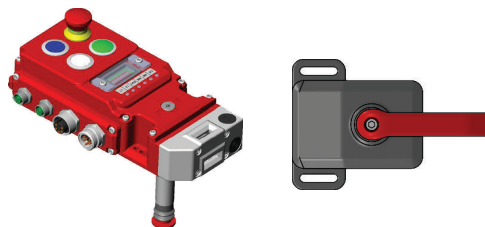
Shown below fitted to a Right Hand door with Front Rotary Handle.



Network address set by DIP switches

- The UGB-NET has both RFID guard interlocking technology and electronic lock monitoring technology using a traditional tongue and cam mechanism to hold the guard closed.
- Daisy chain power and network connections (in/out).
- Choice of standard machine function buttons/lamps or custom configurable (E Stops, Start, Stop, Indication).
- Easy to mount painted solid die-cast or Stainless Steel 316 housings.
- Holds guards closed and locked up to 3000N.
- RFID uniquely coded for high coding anti-tamper.

Shown below with optional Rotary Front Handle and Rear Escape Handle.



TECHNICAL SPECIFICATIONS:

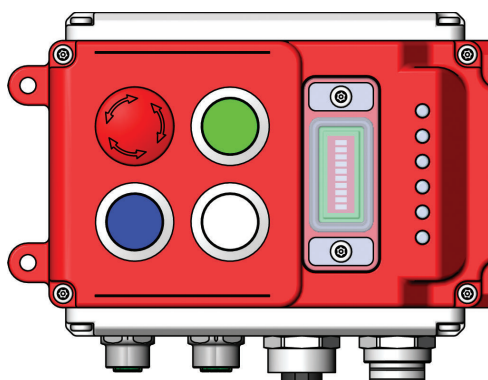
Standards: ISO14119 EN60947-5-3
ISO13849-1 IEC62061

Safety Classification

and Reliability Data:

Supply Voltage	24Vdc (+/- 10%) SELV/PELV
Power Consumption	1A (max)
Connector Option A	Data: 2 x M12 D Code 4 pin Power: 2 x M12 A Code 5 pin
Connector Option B	Data: 2 x M12 D Code 4 pin Power: 2 x 7/8" 5 pin
Safety Outputs	CIP Safety or PROFIsafe
Performance Level Category	PLe/Cat4
Rated Insulation Voltage	250V
Holding Force (ISO14119)	F1Max 3000N Fzh 2307N
Actuator insertion distance	5mm for assured locking
Sao Sar (RFID sensing)	Sao 5mm Sar 20mm
Operating Frequency	1Hz
Body Material	Die-cast painted red or Stainless Steel 316
Head/Actuator Material	Polished Stainless Steel 316
Enclosure Protection	IP65
Operating Temperature	-25C +40C

E-Stop, Lamps & Illuminated Push Buttons (5 different lens colours offered)

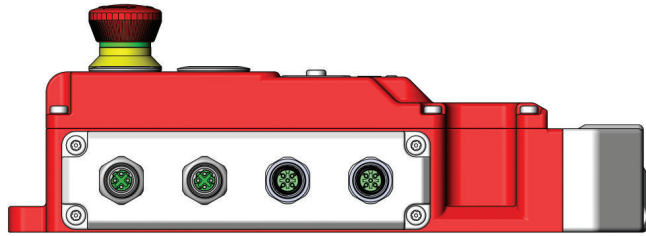


LED diagnostic for ease of status

Choice of M12 or 7/8" quick disconnect (or customer specific)

UGB-NET Gate Box with Integrated Safety Protocols (CIP Safety/PROFIsafe)

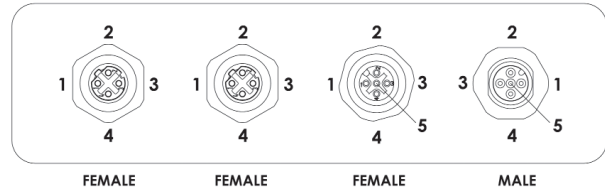
Standard Connector options (customs versions are available)
OPTION A (Ethernet/IP CIP Safety)



DATA		
Port A M12 FEMALE 4 Pin 'D' Code	Port B M12 FEMALE 4 Pin 'D' Code	Function
1	1	TX +
2	2	RX +
3	3	TX -
4	4	RX -

(2 x 4 Pin M12 'D' Code for Data) (2 x 5 Pin M12 'A' Code for Power)

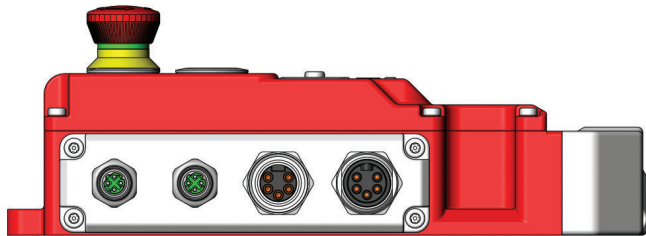
Ethernet /IP CIP Safety



POWER		
Port C M12 FEMALE 5 Pin 'A' Code	Port D M12 MALE 5 Pin 'A' Code	Function
1	1	+24V dc supply
2	2	0V dc
3	3	0V dc
4	4	+24V dc supply
5	5	Earth (case)

Pins 1 and 4 internally connected. Pins 2 and 3 internally connected.

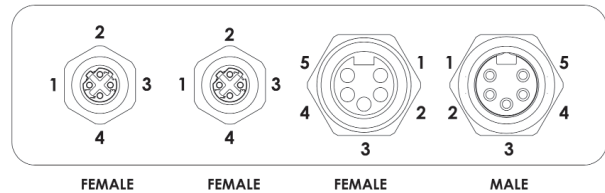
OPTION B (PROFINET/PROFIsafe)



DATA		
Port A M12 FEMALE 4 Pin 'D' Code	Port B M12 FEMALE 4 Pin 'D' Code	Function
1	1	TX +
2	2	RX +
3	3	TX -
4	4	RX -

(2 x 4 Pin M12 'D' Code for Data) (2 x 5 Pin 7/8" for Power)

PROFINET / PROFIsafe



POWER		
Port C 7/8" FEMALE 5 Pin	Port D 7/8" MALE 5 Pin	Function
1	1	0V dc
2	2	0V dc
3	3	Earth (case)
4	4	+24V dc supply
5	5	+24V dc supply

Pins 1 and 2 internally connected. Pins 4 and 5 internally connected.

ACCESSORIES FOR ROTARY FRONT HANDLES & REAR ROTARY ESCAPE HANDLES:

UGB-NET 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 NUMBER	SALES NUMBER	SALES NUMBER
UGB-NET-SFH-M (Die Cast)	REAR HANDLE (Die Cast)	SPRING CATCH (Die Cast)
527006	210005	210006

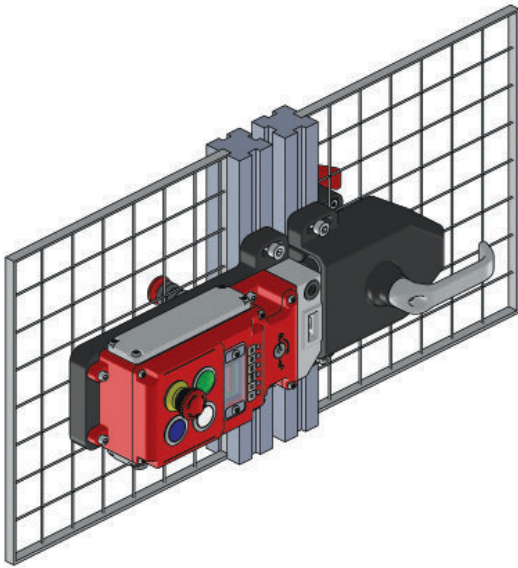
Rotary Front Handle and Mounting Plate	Rear Escape Rotary Handle
SALES NUMBER	SALES NUMBER
UGB-NET-RFH-M (Die Cast)	UGB-RERH-M (Die Cast)
527007	527005

UGB-NET Gate Box with Integrated Safety Protocols (CIP Safety/PROFIsafe)

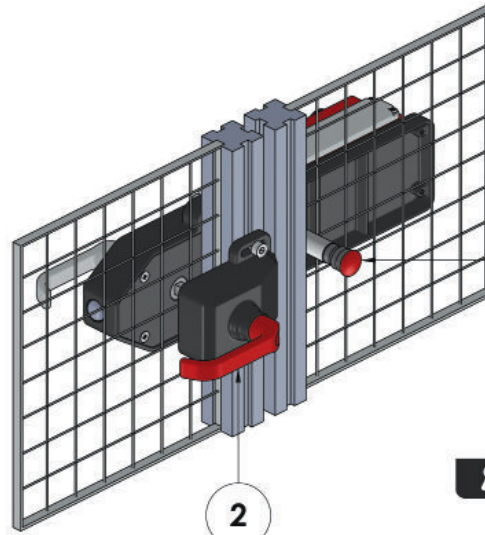
APPLICATION EXAMPLE:

UGB-NET-PROFIsafe/UGB-NET-CIP shown with Front Rotary Handle, Rear Escape Button and Rear Escape Rotary Handle.

VIEWED FROM OUTSIDE GUARDED AREA



VIEWED FROM INSIDE GUARDED AREA



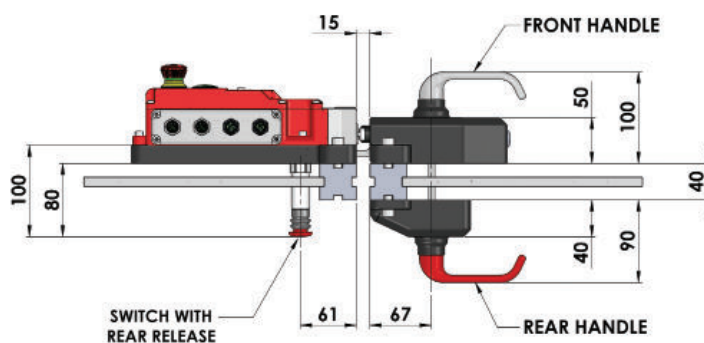
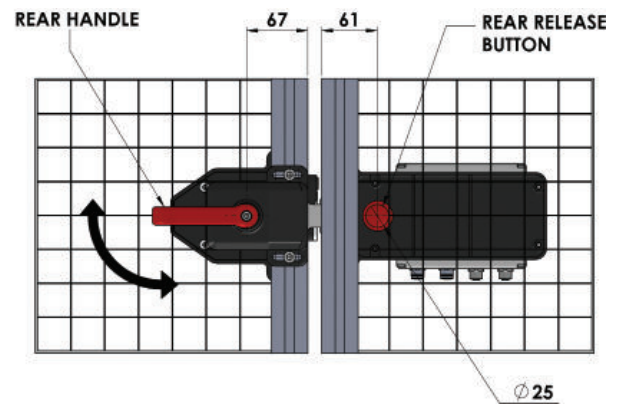
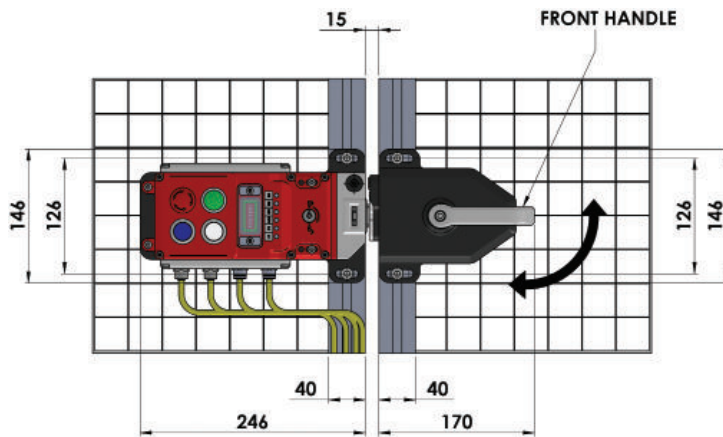
1 PRESS AND HOLD REAR RELEASE BUTTON



TO OPEN USING REAR HANDLE

2

TURN REAR HANDLE ANTI-CLOCKWISE

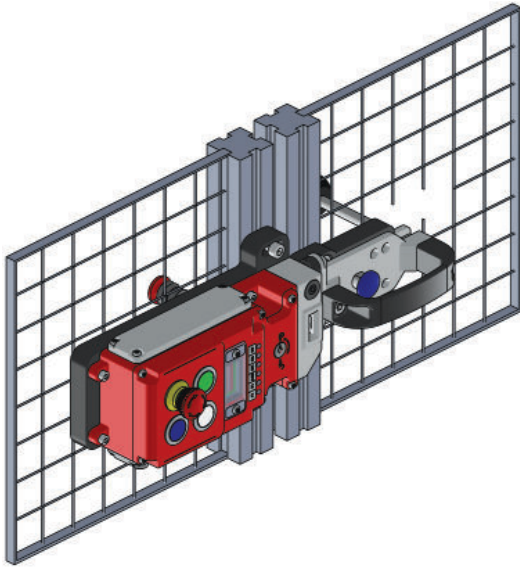


UGB-NET Gate Box with Integrated Safety Protocols (CIP Safety/PROFIsafe)

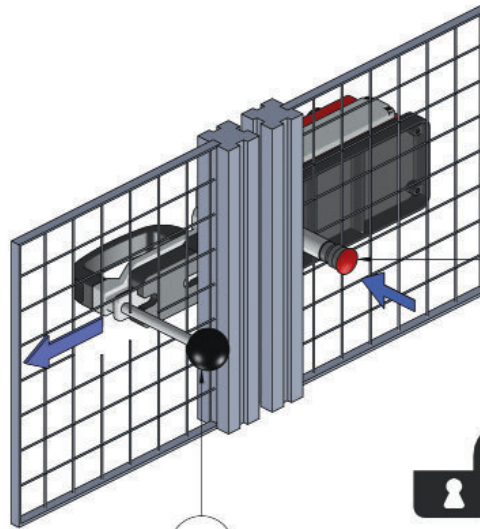
APPLICATION EXAMPLE:

UGB-NET-PROFIsafe/UGB-NET-CIP shown with Sliding Front Handle, Rear Escape Button and Rear Escape Sliding Handle.

VIEWED FROM OUTSIDE GUARDED AREA



VIEWED FROM INSIDE GUARDED AREA



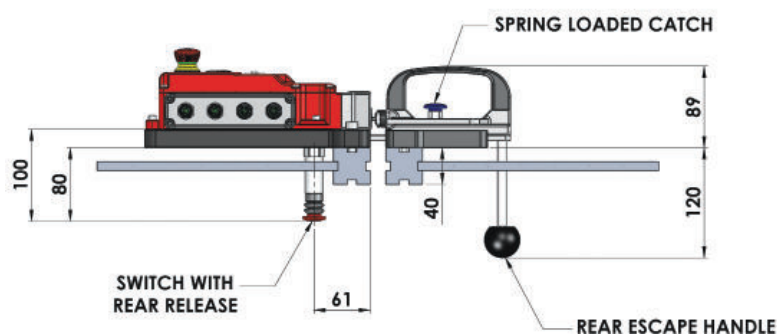
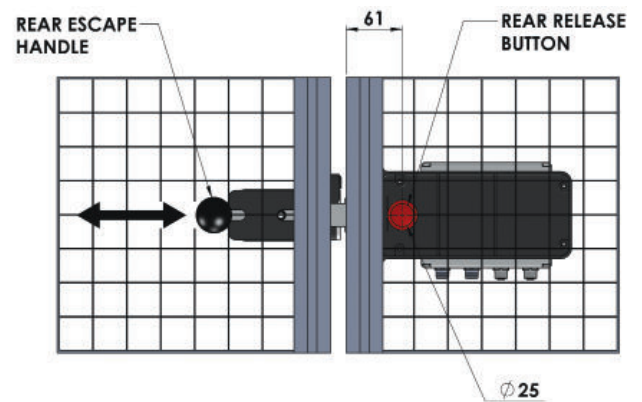
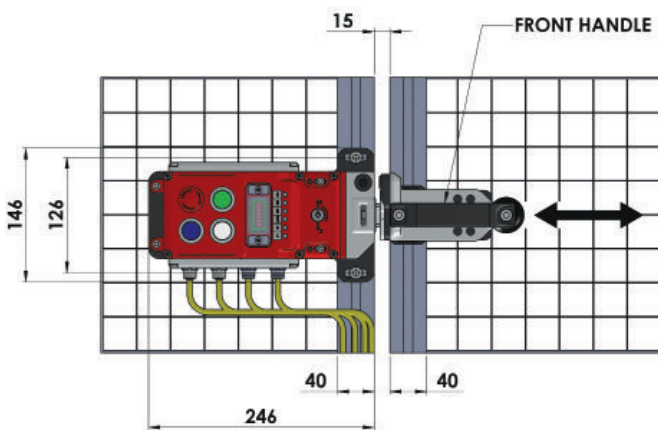
1 PRESS AND HOLD REAR RELEASE BUTTON



TO OPEN USING REAR ESCAPE HANDLE

2

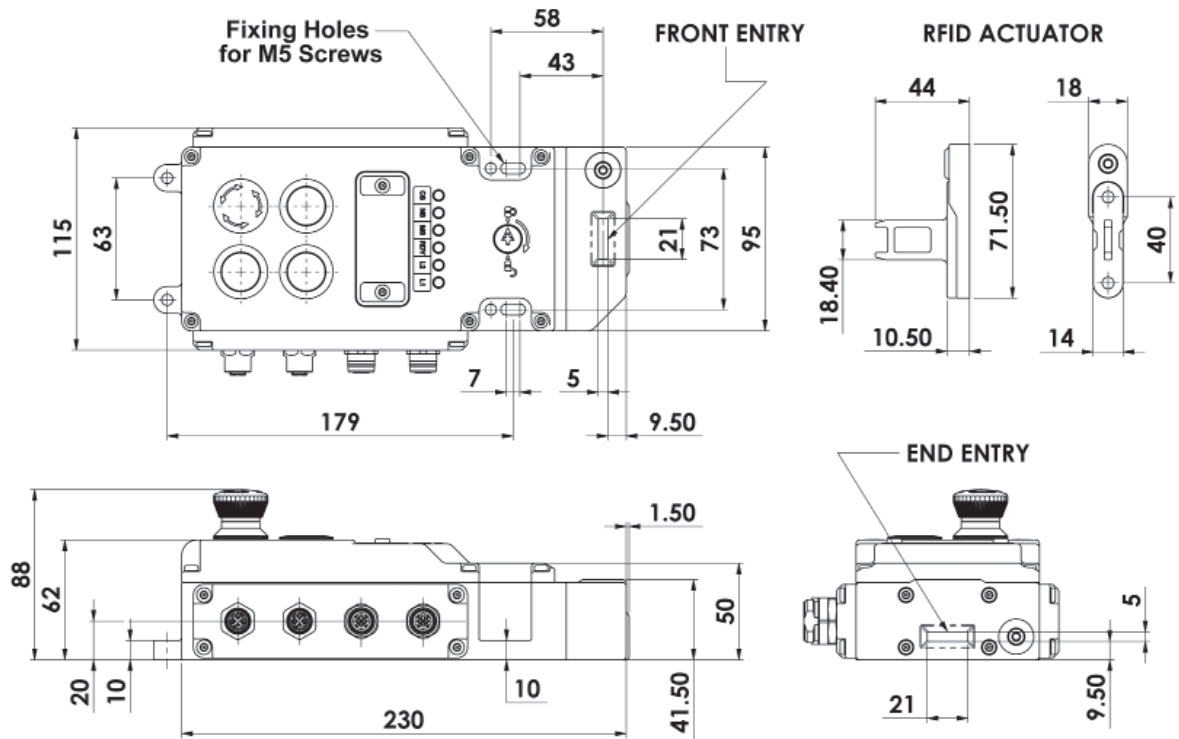
PULL REAR ESCAPE SLIDING HANDLE



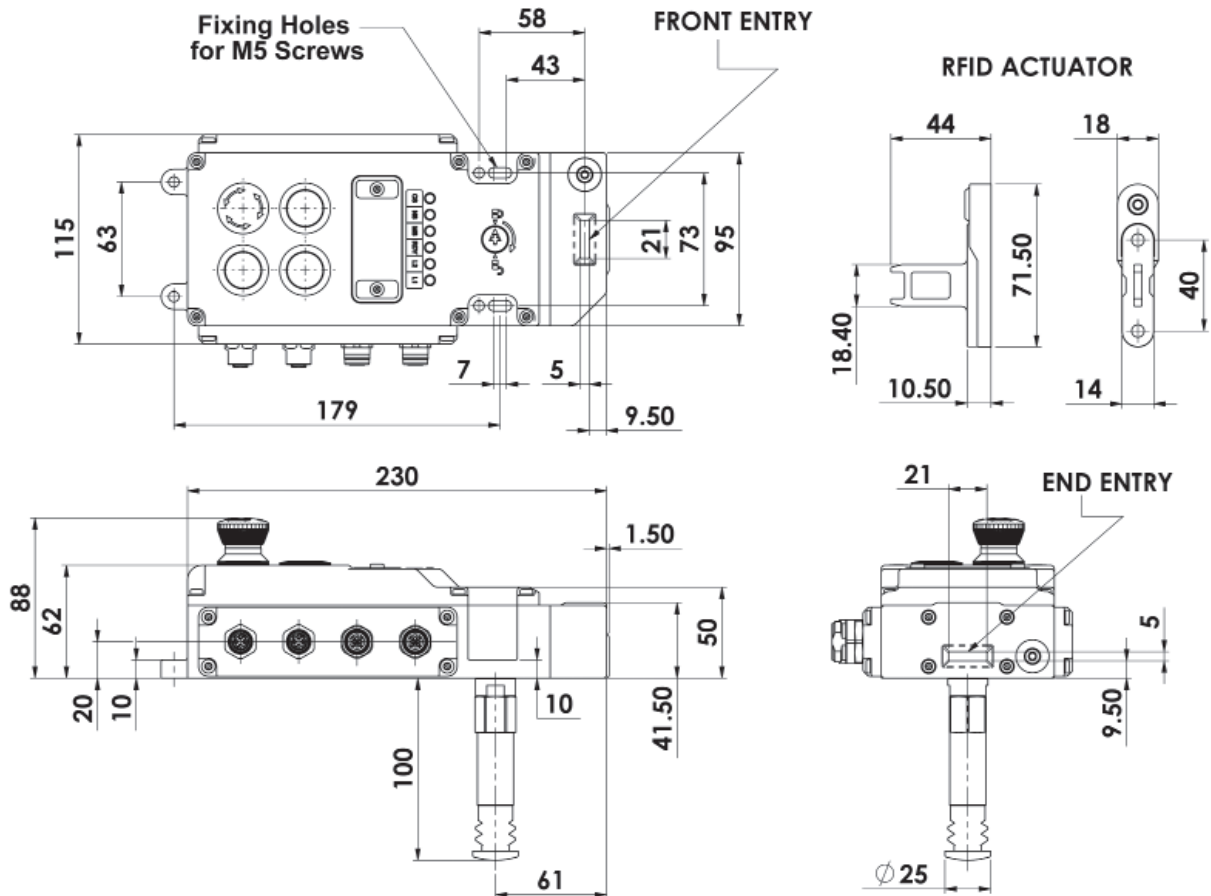
UGB-NET Gate Box with Integrated Safety Protocols (CIP Safety/PROFIsafe)

PRODUCT DIMENSIONS:

TYPE: UGB-NET



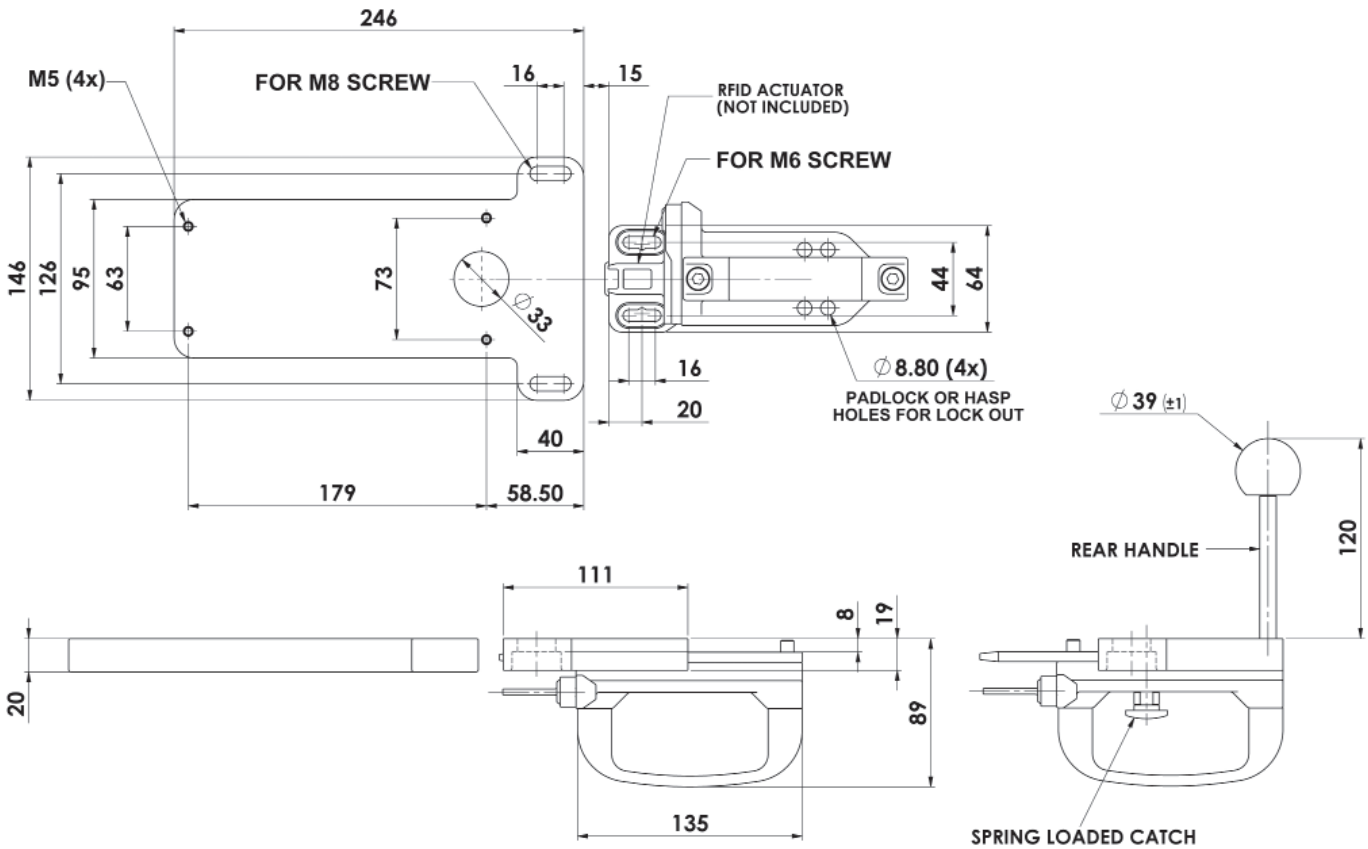
TYPE: UGB-NET-RR (Rear Release)



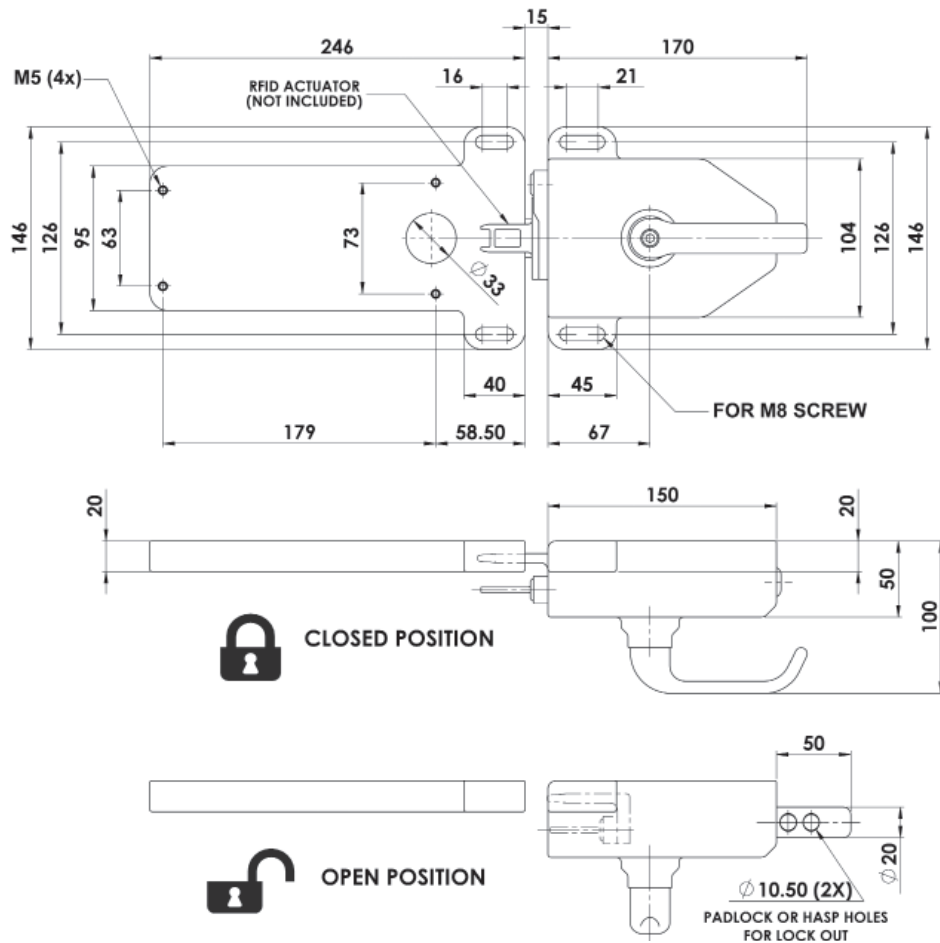
UGB-NET Gate Box with Integrated Safety Protocols (CIP Safety/PROFIsafe)

PRODUCT DIMENSIONS:

TYPE : UGB-NET SLIDING HANDLE







TYPE : UGB-NET ROTARY HANDLE



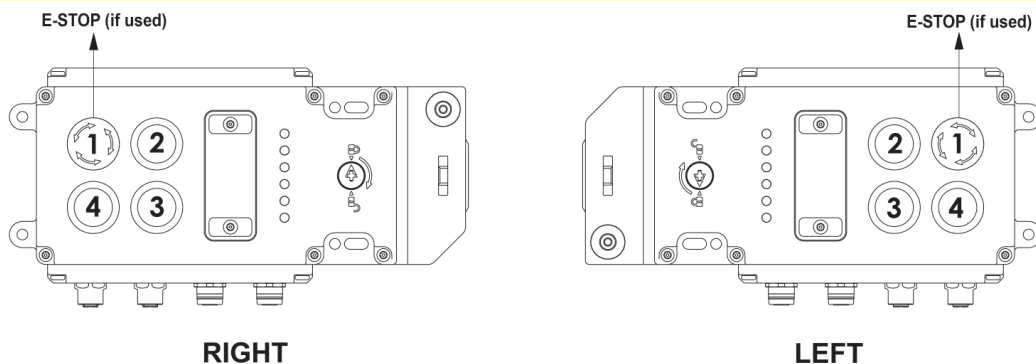
UGB-NET Gate Box with Integrated Safety Protocols (CIP Safety/PROFIsafe)

UGB-NET-PS (PROFIsafe) GATE BOX SWITCHES SALES NUMBERS:

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

 PROFINET TYPE: UGB-NET-M-PS (RIGHT HAND) PROFISAFE	 PROFINET TYPE: UGB-NET-M-PS-RR (RIGHT HAND) PROFISAFE	 PROFINET TYPE: UGB-NET-M-PS (LEFT HAND) PROFISAFE	 PROFINET TYPE: UGB-NET-M-PS-RR (LEFT HAND) PROFISAFE
Connectors: 2 x M12 Data Connectors 2 x 7/8" Power (24Vdc) Connectors	Connectors: 2 x M12 Data Connectors 2 x 7/8" Power (24Vdc) Connectors	Connectors: 2 x M12 Data Connectors 2 x 7/8" Power (24Vdc) Connectors	Connectors: 2 x M12 Data Connectors 2 x 7/8" Power (24Vdc) Connectors
4 x Control Devices*: Illuminated Emergency Stop (x1) Illuminated Push Buttons Lamps Illuminated Selector Switches	4 x Control Devices*: Illuminated Emergency Stop (x1) Illuminated Push Buttons Lamps Illuminated Selector Switches	4 x Control Devices*: Illuminated Emergency Stop (x1) Illuminated Push Buttons Lamps Illuminated Selector Switches	4 x Control Devices*: Illuminated Emergency Stop (x1) Illuminated Push Buttons Lamps Illuminated Selector Switches
SALES NUMBER (Manual Override) 528001	SALES NUMBER (Manual Override) 528002	SALES NUMBER (Manual Override) 528005	SALES NUMBER (Manual Override) 528006
SALES NUMBER (No Manual Override) 528003	SALES NUMBER (No Manual Override) 528004	SALES NUMBER (No Manual Override) 528007	SALES NUMBER (No Manual Override) 528008
*For control devices and lens colours of Push Buttons, Lamps and Selector Switches please refer to the tables below explaining ordering system.	*For control devices and lens colours of Push Buttons, Lamps and Selector Switches please refer to the tables below explaining ordering system.	*For control devices and lens colours of Push Buttons, Lamps and Selector Switches please refer to the tables below explaining ordering system.	*For control devices and lens colours of Push Buttons, Lamps and Selector Switches please refer to the tables below explaining ordering system.

POSITIONS ON LID:

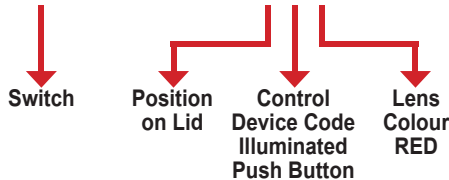


PART NUMBER AND POSITIONS ORDERING EXAMPLE:

Customer requirement:

UGB-NET-M-PS (Right Hand) PROFIsafe with manual release. Note: E-Stop (if used) can only be fitted in position "1".
 To include: 1 x Illuminated Emergency Stop + 1 x RED Illuminated Push Button + 1 x GREEN Lamp + 1 x Illuminated Selector Switch

528001 - 1E - 2BR - 3LG - 4S



Illuminated Emergency Stop		Illuminated Push Buttons			Lamps			Illuminated Selector Switch		Blanking Plug	
Contacts: 2NC		Contacts: 1NO									
Control Device Code	Note	Control Device Code	Colour Code	Colour of Lens	Control Device Code	Colour Code	Colour of Lens	Control Device Code	Description	Code	Description
E	E-Stop can only be fitted into Position 1 on Lid	B	R		L	R		S	1NO Maintained 90° 	X	Plastic Plug used to seal any unused positions.
			B			B					
G			G								
Y			Y								
W			W								

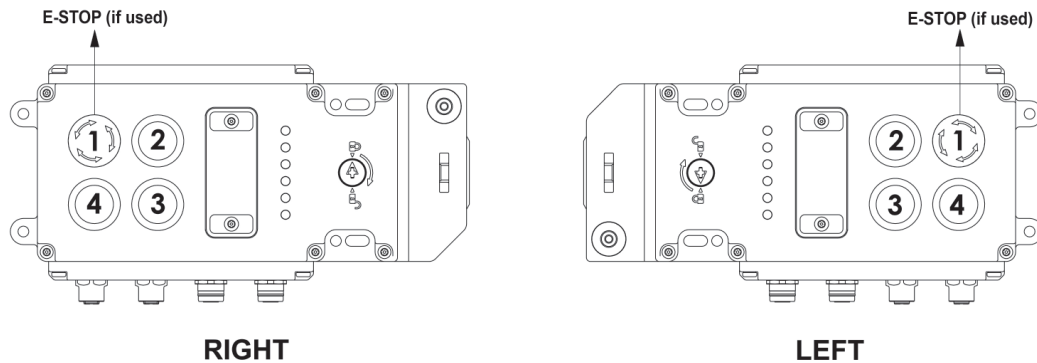
UGB-NET Gate Box with Integrated Safety Protocols (CIP Safety/PROFIsafe)

UGB-NET-CIP (Ethernet/IP CIP Safety) GATE BOX SWITCHES SALES NUMBERS:

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

TYPE: UGB-NET-M-CIP (RIGHT HAND)	TYPE: UGB-NET-M-CIP-RR (RIGHT HAND)	TYPE: UGB-NET-M-CIP (LEFT HAND)	TYPE: UGB-NET-M-CIP-RR (LEFT HAND)
CIP Safety	CIP Safety	CIP Safety	CIP Safety
Connectors: 2 x M12 Data Connectors 2 x M12 Power (24Vdc) Connectors	Connectors: 2 x M12 Data Connectors 2 x M12 Power (24Vdc) Connectors	Connectors: 2 x M12 Data Connectors 2 x M12 Power (24Vdc) Connectors	Connectors: 2 x M12 Data Connectors 2 x M12 Power (24Vdc) Connectors
4 x Control Devices*: Illuminated Emergency Stop (x1) Illuminated Push Buttons Lamps Illuminated Selector Switches	4 x Control Devices*: Illuminated Emergency Stop (x1) Illuminated Push Buttons Lamps Illuminated Selector Switches	4 x Control Devices*: Illuminated Emergency Stop (x1) Illuminated Push Buttons Lamps Illuminated Selector Switches	4 x Control Devices*: Illuminated Emergency Stop (x1) Illuminated Push Buttons Lamps Illuminated Selector Switches
SALES NUMBER (Manual Override)	SALES NUMBER (Manual Override)	SALES NUMBER (Manual Override)	SALES NUMBER (Manual Override)
528101	528102	528105	528106
SALES NUMBER (No Manual Override)	SALES NUMBER (No Manual Override)	SALES NUMBER (No Manual Override)	SALES NUMBER (No Manual Override)
528103	528104	528107	528108
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POSITIONS ON LID:



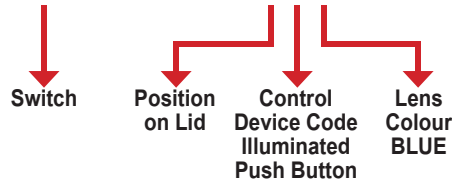
PART NUMBER AND POSITIONS ORDERING EXAMPLE:

Customer requirement:

UGB-NET-M-CIP (Right Hand) CIP safety with manual release. Note: Note: E-Stop (if used) can only be fitted in position "1".

To include: 1 x Illuminated Emergency Stop + 1 x BLUE Illuminated Push Button + 1 x GREEN Lamp + 1 x Illuminated Selector Switch

528501 - 1E - 2BB - 3LG - 4S



Illuminated Emergency Stop		Illuminated Push Buttons			Lamps			Illuminated Selector Switch		Blanking Plug	
Contacts: 2NC		Contacts: 1NO									
Control Device Code	Note	Control Device Code	Colour Code	Colour of Lens	Control Device Code	Colour Code	Colour of Lens	Control Device Code	Description	Code	Description
E	E-Stop can only be fitted into Position 1 on Lid	B	R		L	R		S	1NO Maintained 90° 	X	Plastic Plug used to seal any unused positions.
			B			B					
G			G								
Y			Y								
W			W								