

# IDEM Universal Gate Box



The IDEM Universal Gate Box features a type 4, high-coded RFID sensor, a robust mechanical locking function, and machine control functions in one heavy-duty housing.

These gate boxes can easily be fitted to access doors and offer optional rear release to reduce the risk of operators being trapped inside a hazardous area.

Users will benefit from the high flexibility of the safety gate system with 2- and 4-station models available, offering a wide variety of 22mm pilot device options.

## Benefits

- Offers a high level of safety for both personnel and plant protection
- Highest protection against manipulation and defeat
- Suitable for left- or right-hinged gates
- Maximum flexibility thanks to the 2- and 4-station models
- Reduced installation and maintenance costs

## Features

- 90-degree fixed head
- 3000N holding force
- 24VDC to unlock
- Two NC safety outputs
- Two status outputs
- Two status LEDs
- IP65
- Optional sliding and rotary handles



| IDEM Universal Gate Box Selection Guide |          |                   |                             |   |              |                      |                     |
|---|----------|-------------------|-----------------------------|---|--------------|----------------------|---------------------|
| Part Number                             | Price    | Body Material     | Lock Type                   | Actuator Type                                 | Rear Release | Switch Configuration | Drawing             |
| <a href="#">UGB2-525001</a>             | \$466.00 | Die-cast aluminum | Solenoid<br>24VDC to unlock | Tongue (key) interlock<br>Uniquely coded RFID | No           | 2 station            | <a href="#">PDF</a> |
| <a href="#">UGB2-525002</a>             | \$543.00 |                   |                             |   | Yes          | 2 station            | <a href="#">PDF</a> |
| <a href="#">UGB4-526001</a>             | \$501.00 |                   |                             |   | No           | 4 station            | <a href="#">PDF</a> |
| <a href="#">UGB4-526002</a>             | \$578.00 |                   |                             |   | Yes          | 4 station            | <a href="#">PDF</a> |

- The pilot devices are sold separately and must be fitted by the end user.
- There is a terminal block inside the UGB-KLTM for connecting the safety circuit and lock functionality.
- Please note that the UGB boxes are shallow. Therefore, only IDEM 22mm pushbuttons are recommended.

The gate boxes come with uncovered holes. Holes need to be filled with indicators, push buttons, or blanking plugs, which are accessories purchased separately.

## Examples of Universal Gate Box Complete Assemblies



# IDEM Universal Gate Box Pushbuttons and Indicators



| <b>IDEM Universal Gate Box Specifications</b>        |   |
|--|---|
| <i>Safety Classification and Reliability Data</i>    |   |
| <b>Switching Reliability (B10d)</b>                  | 2.5M operations at 100mA load   |
| <b>Category According to EN ISO 13849-1</b>          | Up to Category 4 with Safety Relay  |
| <b>Performance Level According to EN ISO 13849-1</b> | Up to PLe depending upon system architecture  |
| <b>IEC 632061</b>                                    | Up to SIL3 depending upon system architecture   |
| <b>Safety Data - Annual Usage</b>                    | 8 cycles per hour / 24 hours per day / 365 days   |
| <b>MTTFd</b>   | 1100 years  |
| <b>Agency Approvals</b>                              | cULus, E258676, CE  |
| <i>Electrical and General Specifications</i>         |   |
| <b>Rated Insulation Voltage</b>                      | 500VAC  |
| <b>Contact Terminals</b>                             | Plated brass; conductor 16 AWG to 28 AWG; 0.7 N•m [6 lb in] torque                                      |
| <b>Supply Voltage</b>                                | 21.6 to 26.4 VDC  |
| <b>Solenoid Wattage (Terminal S+)</b>                | 12W (max 500mA)   |
| <b>Switch Wattage (Terminal R+)</b>                  | 1.2 W (max 50mA)  |
| <b>Locking Holding Force</b>                         | 3,000N  |
| <b>Maximum Switching Current</b>                     | Safety contacts 2.5A @24VDC, 6A @ 120VAC, 3A @ 240VDC (720VA break)<br>Auxiliary contacts max 230V@0.5A |
| <b>Maximum Approach/Withdrawal Speed</b>             | 600 mm/s [23.62 in/sec]   |
| <b>Enclosure Protection</b>                          | IP67  |
| <b>Operating Temperature</b>                         | -25°C to +40°C [-13°F to +104°F]  |
| <b>Vibration</b>                                     | IEC 68-2-6, 10-55 Hz + 1Hz  |
| <b>Lid Screws/Torque</b>                             | Stainless steel; T20 Torx;<br>1.5 Nm [1.11 lb•ft]   |
| <b>Recommended Mounting Screws/Torque</b>            | Gate box without handles: M5; 4 N•m [2.95 lb•ft]<br>Gate box with handles: M6, 4 N•m [2.95 lb•ft]       |
| <b>Head Screws/Torque</b>                            | Stainless steel; T20 Torx;<br>1N•m [0.74 lb•ft]   |

# IDEM Universal Gate Box Pushbuttons and Indicators



| Pushbutton Selection Guide |         |                                   |             |            |                  |               |                |             |                    |           |                     |
|----------------------------|---------|-----------------------------------|-------------|------------|------------------|---------------|----------------|-------------|--------------------|-----------|---------------------|
| Part Number                | Price   | Description                       | Barrel Size | Contacts   | Action           | Operator Type | Operator Color | LED Voltage | Voltage Regulation | IP Rating | Drawing             |
| <a href="#">522341</a>     | \$23.50 | Compact pushbutton                | 22mm        | 2 NC       | Momentary        | Flush         | Green          | -           | -                  | IP65      | <a href="#">PDF</a> |
| <a href="#">522332</a>     | \$23.50 |                                   |             | 1 NO, 1 NC | Momentary        | Flush         | Green          | -           | -                  | IP65      | <a href="#">PDF</a> |
| <a href="#">522331</a>     | \$23.50 |                                   |             | 1 NO, 1 NC | Momentary        | Flush         | Red            | -           | -                  | IP65      | <a href="#">PDF</a> |
| <a href="#">522334</a>     | \$23.50 |                                   |             | 1 NO, 1 NC | Momentary        | Flush         | Blue           | -           | -                  | IP65      | <a href="#">PDF</a> |
| <a href="#">522335</a>     | \$23.50 |                                   |             | 1 NO, 1 NC | Momentary        | Flush         | Black          | -           | -                  | IP65      | <a href="#">PDF</a> |
| <a href="#">522352</a>     | \$32.00 | Compact illuminated pushbutton    | 22mm        | 1 NC       | Momentary        | Flush         | Green          | 24 VAC/VDC  | Full voltage       | IP65      | <a href="#">PDF</a> |
| <a href="#">522351</a>     | \$32.00 |                                   |             | 1 NC       | Momentary        | Flush         | Red            | 24 VAC/VDC  | Full voltage       | IP65      | <a href="#">PDF</a> |
| <a href="#">522235</a>     | \$37.50 | Compact emergency stop pushbutton | 22mm        | 2 NC       | Twist to release | Mushroom      | Red            | -           | -                  | IP54      | <a href="#">PDF</a> |
| <a href="#">522236</a>     | \$37.50 |                                   |             | 1 NO, 1 NC | Twist to release | Mushroom      | Red            | -           | -                  | IP54      | <a href="#">PDF</a> |

| Indicator Selection Guide |         |                    |             |                |                |                    |                    |           |                     |
|---------------------------|---------|--------------------|-------------|----------------|----------------|--------------------|--------------------|-----------|---------------------|
| Part Number               | Price   | Description        | Barrel Size | Operator Color | Light Function | LED Voltage Rating | Voltage Regulation | IP Rating | Drawing             |
| <a href="#">522433</a>    | \$25.00 | Compact indicating | 22mm        | Green          | Permanent      | 24 VAC/VDC         | Full voltage       | IP65      | <a href="#">PDF</a> |
| <a href="#">522432</a>    | \$25.00 |                    |             | Red            | Permanent      | 24 VAC/VDC         | Full voltage       | IP65      | <a href="#">PDF</a> |
| <a href="#">522431</a>    | \$25.00 |                    |             | Yellow         | Permanent      | 24 VAC/VDC         | Full voltage       | IP65      | <a href="#">PDF</a> |
| <a href="#">522434</a>    | \$25.00 |                    |             | Blue           | Permanent      | 24 VAC/VDC         | Full voltage       | IP65      | <a href="#">PDF</a> |
| <a href="#">522435</a>    | \$25.00 |                    |             | White          | Permanent      | 24 VAC/VDC         | Full voltage       | IP65      | <a href="#">PDF</a> |



[522451](#)



[522452](#)

| Pushbutton Accessories Selection Guide |        |               |             |                     |
|--|--------|---------------|-------------|---------------------|
| Part Number                            | Price  | Description   | Barrel Size | Drawing             |
| <a href="#">522451</a>                 | \$3.75 | Legend holder | 22mm        | <a href="#">PDF</a> |
| <a href="#">522452</a>                 | \$3.75 | Blanking plug | 22mm        | <a href="#">PDF</a> |



[522435](#)

# IDEM Universal Gate Box Pushbuttons and Indicators



## IDEM UGB Push Button and Indicator General Specifications

|  | <i>Emergency Stop Push Button</i>   | <i>Flush Push Button</i>  | <i>Illuminated Push Button</i>                      | <i>Pilot Light</i>                    |
|--|---|---|---|---------------------------------------|
| <b>Device Mounting</b>   | Fixing Hole 0.89 in [22.5 mm] IEC 60947-1   |   |   |                                       |
| <b>Fixing Mode</b>   | Fixing nut beneath head tightend to 17.7 - 21.24 lbf•in [2 - 2.4 N•m]   |   |   |                                       |
| <b>Contact Operation</b>   | Snap action   | Slow break  |   | N/A                                   |
| <b>Contact Tightening Torque</b>                                   | 7.08 - 10.62 lbf•in [0.8 - 1.2 N•m]   |   |   |                                       |
| <b>Maximum Connection Wire Size</b>                                | 2 x 1.5mm <sup>2</sup> [16 AWG] with cable end<br>2 x 2.5 mm <sup>2</sup> [14 AWG] without cable end  |   |   |                                       |
| <b>Minimum Connection Wire Size</b>                                | 1 x 0.34 mm <sup>2</sup> [21 AWG]   |   |   | 0.22 mm <sup>2</sup> [23 AWG]         |
| <b>Mechanical Durability</b>                                       | 100,000 cycles  | 1,000,000 cycles  | 300,000 cycles                                      | N/A                                   |
| <b>Ui Rated Insulation Voltage</b>                                 | 250V (IEC 60947-1)  |   |   |                                       |
| <b>Ui Rated Impulse Withstand Voltage</b>                          | 4kV   | 4kV   | 4kV   | 6kV                                   |
| <b>I<sub>e</sub> Rated Operational Current<br/>(IEC 60947-5-1)</b> | 0.1 A @ 250 V (DC-13, R300)<br>0.22 A @ 125 V (DC-13, R300)<br>0.75 A @ 240 V (AC-15, C300)<br>1.5 A @ 120 V (AC-15, C300)  | 0.1 A @ 250 V (DC-13, R300)<br>0.22 A @ 125 V (DC-13, R300)<br>0.3 A @ 240 V (AC-15, C300)<br>0.6 A @ 120 V (AC-15, C300) |   | N/A                                   |
| <b>Electrical Durability</b>                                       | 1,000,000 Cycles (DC-13, 0.30 A, 24V, 216,000 cycles/min, 0.5 IEC 60947-5-1 appendix C)<br>1,000,000 Cycles (AC-15, 0.03 A, 230V, 216,000 cycles/min, 0.5 IEC 60947-5-1 appendix C)<br>1,000,000 Cycles (AC-15, 0.09 A, 240V, 108,000 cycles/min, 0.5 IEC 60947-5-1 appendix C) |   |   | N/A                                   |
| <b>Electrical Reliability</b>                                      | $\lambda < 5 \times 10^{-7}$<br>17 V 5 mA (IEC 60947-5-4)   | $\lambda \leq 10^{-6}$<br>17 V 5 mA (IEC 60947-5-4)   | $\lambda \leq 10^{-6}$<br>17 V 5 mA (IEC 60947-5-4) | N/A                                   |
| <b>LED Signal type</b>   | N/A   | N/A   | Steady  | Steady                                |
| <b>LED Supply Voltage</b>  | N/A   | N/A   | 19.2 - 30 VDC<br>21.6 - 26.4 VAC                    | 19.2 - 30 VDC<br>21.6 - 26.4 VAC      |
| <b>LED Current Consumption</b>                                     | N/A   | N/A   | 18 - 27 mA  | 20 - 27 mA                            |
| <b>LED Service Life</b>  | N/A   | N/A   | 70,000h at rated voltage and 77°F [25°C]            |                                       |
| <b>Storage Temperature</b>   | -40 to 158°F [-40 to 70°C]  |   |   |                                       |
| <b>Operating Temperature</b>                                       | -13 to 158°F [-25 to 70°C]  |   |   |                                       |
| <b>Electrical Shock Protection Class</b>                           | Class II (IEC 61140)  |   |   | N/A                                   |
| <b>Over Voltage Category</b>                                       | N/A   | N/A   | N/A   | Class II (IEC 60536)                  |
| <b>NEMA Degree of Protection</b>                                   | NEMA 12 (UL 50 E)<br>NEMA 3 (UL 50 E)   | NEMA 12 (UL 50 E)<br>NEMA 3 (UL 50 E)   | NEMA 12 (UL 50 E)                                   | NEMA 4 (UL 50 E)<br>NEMA 12 (UL 50 E) |
| <b>Vibration</b>   | 5G / 2-500 Hz (IEC 60068-2-6)   |   |   |                                       |
| <b>Shock</b>   | 15G, 11ms   | 50G, 11ms<br>30G, 18ms  | 50G, 11ms<br>30G, 18ms                              | 50G, 11ms                             |

# IDEM Universal Gate Box Accessories



IDEM's gate bolts are engineered with rugged die-cast metal and steel construction and are capable of handling shearing forces of up to 10,000N (F1Max) for securing large, hinged doors.

These gate bolts are designed for ease of installation on hinged or sliding guards using four M6 mounting bolts, without requiring additional brackets or door handles.

They are also designed to be impervious to misalignment damage, ensuring long-lasting performance.

Operators must manually close the guard, eliminating the possibility of accidental closure.

## IDEM Universal Gate Box Specifications

| Part Number                          | Price    | Description               | Handle Type | Door Type  | Fits                                      | Drawing                    |
|--------------------------------------|----------|---------------------------|-------------|------------|---|----------------------------|
| <a href="#"><u>UGB2-527003-R</u></a> | \$164.00 | Handle and mounting plate | Rotary      | Right hand | UGB series 2-station universal gate boxes | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>UGB2-527003-L</u></a> | \$164.00 | Handle and mounting plate | Rotary      | Left hand  | UGB series 2-station universal gate boxes | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>UGB4-527004-R</u></a> | \$174.00 | Handle and mounting plate | Rotary      | Right hand | UGB series 4-station universal gate boxes | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>UGB4-527004-L</u></a> | \$174.00 | Handle and mounting plate | Rotary      | Left hand  | UGB series 4-station universal gate boxes | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>UGB-527005-R</u></a>  | \$142.00 | Rear escape handle        | Rotary      | Right hand | UGB series universal gate boxes           | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>UGB-527005-L</u></a>  | \$142.00 | Rear escape handle        | Rotary      | Left hand  | UGB series universal gate boxes           | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>UGB2-527001</u></a>   | \$144.00 | Handle and mounting plate | Slide       | –          | UGB series 2-station universal gate boxes | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>UGB4-527002</u></a>   | \$153.00 | Handle and mounting plate | Slide       | –          | UGB series 4-station universal gate boxes | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>GB-210005</u></a>     | \$19.50  | Rear escape handle        | Slide       | –          | Sliding handle and mounting plate         | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>GB-210006</u></a>     | \$19.50  | Spring-loaded catch       | Slide       | –          | Sliding handle and mounting plate         | <a href="#"><u>PDF</u></a> |



**UGB2-527003-R**



**UGB4-527004-L**



**UGB-527005-R**



**UGB2-527001**



**GB-210005**



**GB-210006**