

# 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



**UGB2-525001**



**UGB2-525002**



**UGB4-526001**

## 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 24VDC to unlock	Tongue (key) interlock 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



IDEM Universal Gate Box Specifications	
<b>Safety Classification and Reliability Data</b>	
<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
<b>Electrical and General Specifications</b>	
<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) 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; 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] Gate box with handles: M6, 4 N•m [2.95 lb•ft]
<b>Head Screws/Torque</b>	Stainless steel; T20 Torx; 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>

Illuminator 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 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 (IEC 60947-5-1)</b>	0.1 A @ 250 V (DC-13, R300) 0.22 A @ 125 V (DC-13, R300) 0.75 A @ 240 V (AC-15, C300) 1.5 A @ 120 V (AC-15, C300)	0.1 A @ 250 V (DC-13, R300) 0.22 A @ 125 V (DC-13, R300) 0.3 A @ 240 V (AC-15, C300) 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) 1,000,000 Cycles (AC-15, 0.03 A, 230V, 216,000 cycles/min, 0.5 IEC 60947-5-1 appendix C) 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>	$\lambda < 5 \times 10^{-7}$ 17 V 5 mA (IEC 60947-5-4)	$\lambda \leq 10^{-6}$ 17 V 5 mA (IEC 60947-5-4)	$\lambda \leq 10^{-6}$ 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 21.6 - 26.4 VAC	19.2 - 30 VDC 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) NEMA 3 (UL 50 E)	NEMA 12 (UL 50 E) NEMA 3 (UL 50 E)	NEMA 12 (UL 50 E)	NEMA 4 (UL 50 E) NEMA 12 (UL 50 E)
<b>Vibration</b>	5G / 2-500 Hz (IEC 60068-2-6)			
<b>Shock</b>	15G, 11ms	50G, 11ms 30G, 18ms	50G, 11ms 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**