Central Locking Solutions

That Go the Distance





When Access Counts

Rough weather, vibrations, bumpy roads and construction sites are environments that Industrilas Vector $^{\text{TM}}$ access solutions face every day. That is why they are designed to last, with supreme sealing, compression and vibration resistance.

Our central locking solutions are developed in close partnership with the industry and offer secure and intuitive latching for all types of vehicles, such as long-haul trucks, Con-Ag machinery, work trucks and specialty vehicles. The smart design makes installation fast and easy.

The Vector central locking latches can easily be connected to the vehicle's own system and be operated with the vehicle's original key fob. If you have many latches on your vehicle, you can use our control unit to connect all of them.

Serving the Sector for Decades

Industrilas has been developing and manufacturing access solutions for vehicles for over 40 years. All with total control over the production chain, from design and manufacturing to final surface treatments and assembly. Our quality management system is certified according to IATF 16949.

We have a presence in more than 40 countries and have manufacturing sites in Europe, Central America, South America and Asia. Our headquarters are located in Nässjö, Sweden.











Images: Industrilas, @alublack.com, @alu-cab.com



Industrilas Vector™ T3 Central Locking €



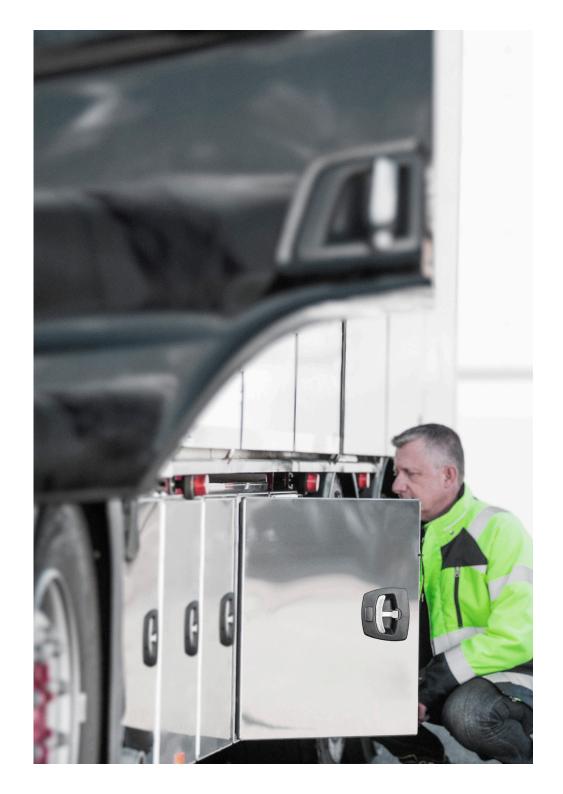
This stylish latch is designed for the end user, with a new level of touch, feel and tactile feedback. It is robust and will not buzz, squeak or rattle - even though it is made from lightweight material. Four blindmount studs and a PUR-gasket ensure waterproof assembly, and Vector T3 is vibration-resistant according to DIN EN 61373.

The central locking function is adapted to both 12V and 24V systems and when you connect Vector T3 to the vehicle's electrical system, you can use the existing key fob to lock and unlock the latches. When Vector T3 is connected to the vehicle's information system, it signals if the T-bar is open or closed and if the latch is locked or unlocked.

Vector T3 provides a 4 mm compression and when it is locked, the T-bar is securely fastened in the closed position. This means there is no way to open the T-bar and break the seal of the door – without unlocking it. You can use Vector T3 with fixed or adjustable roller cams, as well as 1-, 2- and 3-point latching systems.



The tray is available in glass fibre reinforced polyamide or zinc. If you choose zinc, the surface can be either chrome plated or black texture powder coated. Handles are available in zinc or stainless steel.



Industrilas Vector™ Trigger Latch Central Locking

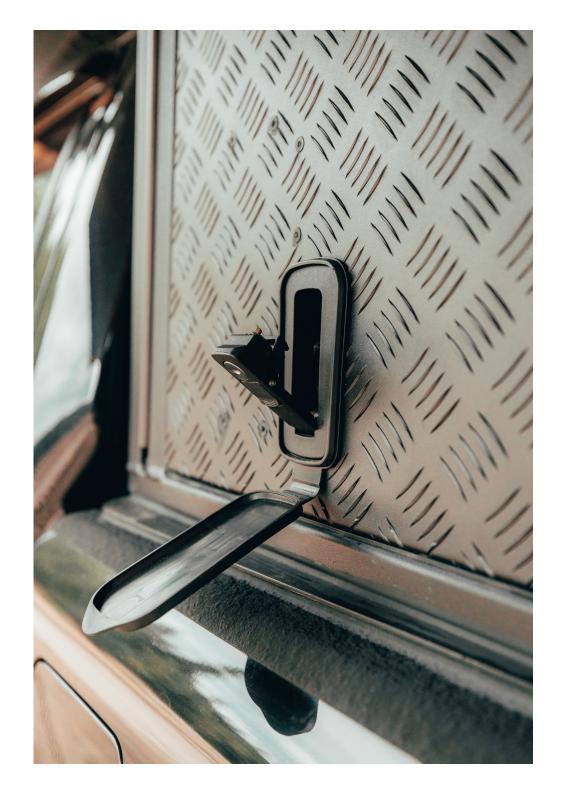
Vibration resistant flush mounted compression latch for central locking vehicle applications. The PUR-gasket and O-rings ensure IP66 protection against water and dust. And with an additional gasket you get a sealed installation even on irregular surfaces like diamond plate metal. The adjustable grip range is 11–61 mm and the latch is suitable for door thickness up to 7 mm.

This central locking latch is available for 12V and 24V systems and when you connect it to the vehicle's electrical system, you can use the existing key fob to lock and unlock the latches. You can choose to have the latch with or without a feedback function that tells the system if the latch is unlocked or locked.

The latch is delivered with mounting bracket for quick and easy assembling. For the most demanding conditions, we recommend the dust cover for the whole latch.







Being in Control

Most often, a vehicle or work truck has many hatches that need their own latches. To make installation and operation easier, you can connect the latches to a separate control unit, that handles input and output signals.

Industrilas Vector™ Control Unit

Control unit to operate 12V or 24V central locking systems. It has two 30A outputs and one 10A output. This enables the possibility to operate a lot of latches and to group them as separate zones. If you connect the control unit to the vehicle's own central locking system, all latches can be operated with the vehicle's original key fob. If you want separate key fobs, Vector Control Unit can be delivered with its own.

When you connect the control unit to the vehicle's information system, it can send signals and tell you if a handle or latch is open or closed, locked or unlocked.



Control Unit 12V

Control unit with two remote key fobs to operate 12V central locking systems. It has an output signal of 30A, making it possible to manage many Vector central locking handles or latches (12V).



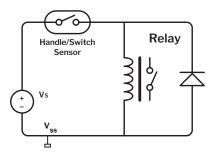






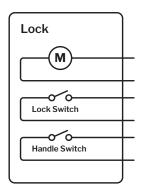
Specifications

Example Circuit Driving a Relay

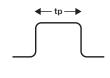


When a reed switch is used to control an inductive device (relay coil or solenoid, motor, etc.) the energy stored in the inductance in the device will subject the switch contacts to a high voltage when the reed switch opens. When the switch contacts open, the gap is initially small. Arcing across this contact gap can occur immediately after the switch opens. Increased arcing decreases switch life or may damage the switch permanently. Typically a diode is used to suppress the arcing. Make sure your circuit has a suppression diode when driving inductive loads!

Schematic Diagram



Lock Control Signals



tp=0.5-1.0 sec

UNLOCK: Positive voltage pulse (tp) on Input A

LOCK: Positive voltage pulse (tp) on Input B

A constant voltage on either input will destroy the motor.

| | Vector T3 | Vector Trigger Latch |
|--|-----------------------------------|-----------------------------------|
| Operation Voltage | 12V or 24V DC | 12V or 24V DC |
| Supply Current/ Current Consumption | 2A (max) @12V 1A (max) @24V | 2A (max) @12V 1A (max) @24V |
| Lock/Unlock Pulse Time | 0.5 - 1.0 sec (Do not Exceed) | 0.5 - 1.0 sec (Do not Exceed) |
| Handle Status Sensor | Max 30V DC, 0.5A | Max 175V DC, 0.25A |
| Handle Sensor Output | Contact closed when handle closed | Contact closed when handle closed |
| Lock Status Sensor | Max 30V DC, 0.5A | Max 30V DC, 0.5A |
| Lock Sensor Output | Contact closed when handle locked | Contact closed when handle locked |
| IP Rating | IP65 | IP66 |
| EMC Standards | UN ECE R10 | UN ECE R10 |
| Operating Temperature | –15 to +55 °C | -40 to +70°C |
| Maximum Tightening Torque | 2.2 Nm (4 nuts, m5) | 6 ±0.5 Nm |
| Mechanical Override Cylinder | Yes | Yes |

When Access Counts

Industrilas develops, designs and manufactures access solutions for all kinds of industrial applications. Our main drive is a neverending curiosity about our customers and their business. We are passionate about finding solutions that will enhance the performance of our customers' products and their business.

We openly welcome you into the Industrilas family, and together we will find the best possible solution to the challenges you are facing. Sometimes this means a well-proven standard solution and at other times it means the innovation of something the world has never seen.

Industrilas is a Swedish company, founded in 1981. Over the course of 40 years, we have grown from a one-person startup to become one of the world's leading suppliers of access solutions. Today, we are present in more than 40 countries and have manufacturing sites in Europe, North America, South America and Asia.

The group's head office is in Nässjö, Sweden.

