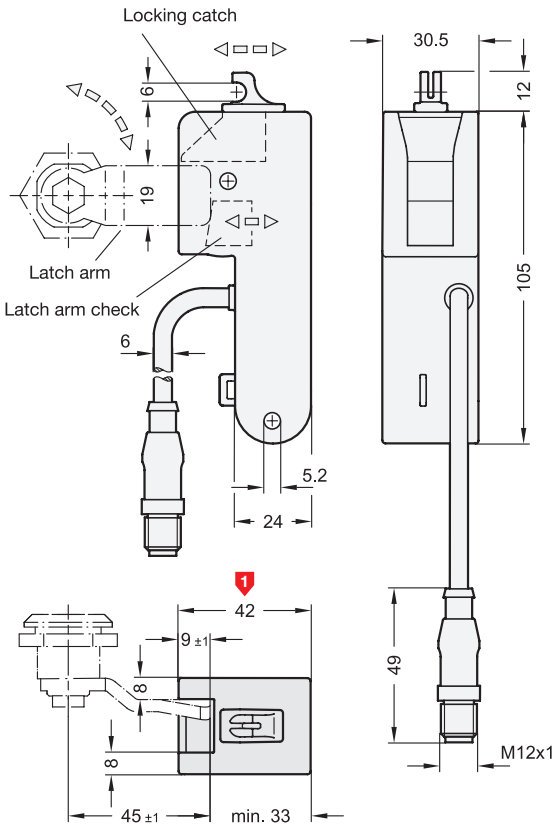
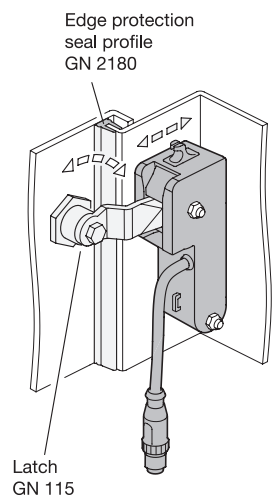


Application example



Metric

2 Identification no.

2 With latch arm check

3 Connection type

A Connector plug (with 0.25 m cable)

Specification

Housing / Locking catch / Latch arm check
Plastic, Polyamide (PA)
- Glass fiber reinforced
- Black, RAL 9005, matte finish

Cable
Plastic, Polyurethane (PUR)
Black

Plug
- Plastic, 8-pin, M12x1
- Knurled screw connection
  Brass, nickel plated

Operating temperature
-4 °F to +140 °F (-20 °C to +60 °C)

RoHS

Electromechanical locking systems GN 120.4 are used together with cam latches GN 115 or GN 515. In the closed position, the latch arm is locked by the locking catch and by an electrical input signal. In addition, the presence of the latch arm in the closed position is detected and emitted as an output signal.
The locking system can be used for left or right locks and increases the latch distance A by 8 mm. Existing installations can be upgraded with minimal effort. The electromechanical locking system is also not visible from the outside.

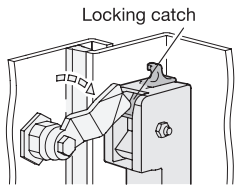
see also...	Page
GN 115 Cam Latches	QVX
GN 515 Cam Latches	QVX
GN 2180 Edge Protection Seal Profiles	QVX
Technical Information	
IP Protection Classes	QVX
Plastic Characteristics	QVX
Accessory	
GN 330 Cables with Connector Coupling	QVX

How to order

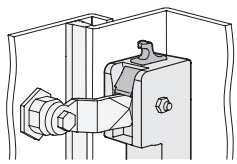
GN120.4-42-2-A

1	Width
2	Identification no.
3	Connection type

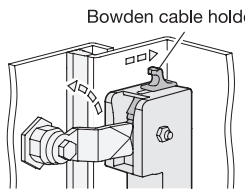
Operation description



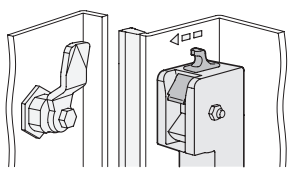
If the latch arm is moved to the closed position via the rotation limited to 90°, the spring-loaded locking catch snaps forward to prevent reopening of the cam latch.



In the closed position, the presence of the latch arm is detected by the latch arm check, and a high signal is output at the latch arm check output (pin 4) if a connection is also present between the additional contact pins 5 and 6. For example, this can take the form of a simple wire bridge or a door position check.

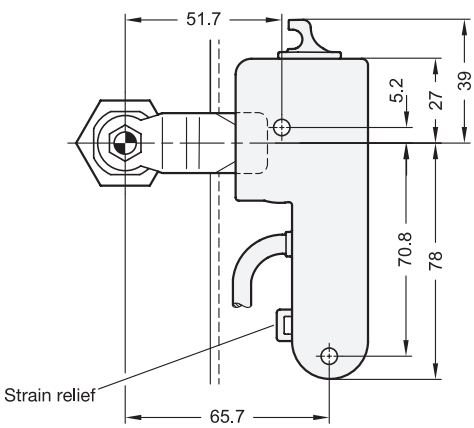


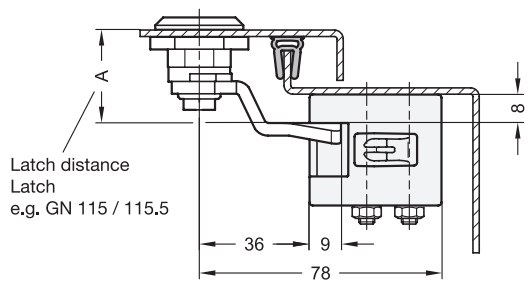
To release the latch again, a high signal is applied to control input pin 4, causing the locking catch to be withdrawn electromechanically. In the event of a power failure or system fault, the locking catch can be pushed back via the manual emergency release. The emergency release is designed to allow the fastening of a Bowden cable.



When the high signal at control input pin 4 falls away, the locking catch is released by the electromechanical mechanism, allowing the spring to push it forward again into the initial position.

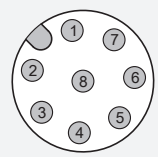
Technical and assembly instructions





After installation, the connection cable can be additionally secured by a cable tie at the strain relief if necessary. The electromechanical locking system GN 120.4 can be easily added to existing installations. To accommodate the electro-magnetic locking system, it is only necessary to increase the latch distance A of the latch by 8 mm. Corresponding latch arms are available for all typical latch distances.

Mechanical features		
Fastening	2x through-holes for M5 screws	
Recommended torque	max. 2 Nm	
Protection type	IP2x (observe cable protection!)	acc. to EN 60529
Emergency release	Fastening option for Bowden cable	

Electrical features / Safety features		
Supply voltage	12 - 24 VDC	
Max. power consumption	max. 120 mA; Stand-by 9mA	
Utilization category	DC 13: 24 VDC / 120 mA	acc. to EN 60947-5-1
Contacts, connection type Plug M12x1, 8-pin, A-coded		1 - Not used 2 - Supply voltage 3 - Release control input 4 - Latch arm check output 5 - Additional contact input 6 - Additional contact output 7 - 0 VDC / functional grounding 8 - Not used
Cable	8x0.25mm2, Li9Y11Y, jacket PUR, UL	acc. to IEC 60332-1-2
Strain relief	With cable tie	
Short-circuit current	1000 A	acc. to EN 60947-5-1
Rated insulation voltage	30 VDC	
Operating temperature	-4 °F ... +140 °F (-20 °C ... +60 °C)	
Degree of pollution, external	2	acc. to EN 60947-5-1
Mission time (TM)	20 years	acc. to EN ISO 13849-1
Number of cycles (B10 d)	50 000	acc. to EN ISO 13849-1

Approvals, conformities, applicability		
CE marking UL Recognized		EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-6 EN 61000-4-8

Information

Additional important information and instructions for using the electromechanical locking system GN 120.4 can be found in the operating instructions. These are included with the product and can also be downloaded as a PDF at www.jwwinco.com/service.
The electromechanical locking system must be installed and commissioned by a qualified specialist in accordance with the information in the operating instructions as well as the national and international provisions and applicable standards. JW Winco accepts no legal liability for missing or incorrect information or the consequences thereof.