CEMO Motor cylinder

CES Motor cylinder
Network-compatible with online management
CEMO Motor cylinder

The CEStronics motor cylinder CEMO automatically locks and unlocks doors and other devices or arrangements designed to keep things under lock and key. It is controlled by an interated electronic controlunit that transmits time-related or individual enable signals to the motor cylinder.

From the outside, the motor cylinder can be operated with a mechanical key, by entering a code or by means of RFID media in combination with an access control system. From the inside, the cylinder is operated with a mechanical knob or by means of opening sensors.

CEMO is fully compatible with all CES locking systems as from system S4000 and can be inserted in all locks prepared for profile cylinders. It supports the operation of locks with latch lever, dead-bolt only locks, multipoint locks and locks with anti-panic function.

Features

- Simple fitting, independent of the existing armature
- Extremely short opening and locking time (approx. 1.5 seconds for two locking turns and latch)
- Automatic identification of the lock function for: door opening direction (DIN left, DIN right), number of locking turns, anti-panic function
- Automatic Daytime/Nighttime mode switchover by integrated timer
- 5 zero potential inputs for:
  - Permanent Open mode (daytime latch function)
  - Daytime/Nighttime mode switchover under time control of access control systems
  - Unlock door command
  - Lock door command
  - Door monitoring via door contact
- 2 zero potential outputs for connecting indicating devices for door status and operating errors
- Automatic locking assistance for Unlock/Lock key operation
- Automatic locking assistance for Unlock/Lock door knob operation

Before installation on doors in escape and emergency routes, you must check if lock and motor cylinder are suitable for equipping the door.
**Content of delivery of CEMO full package**

- Locking cylinder with 1 key and motor unit, mat chrome finish
- Controls, incl. power pack, in plastic housing
- 7m cable
- Door contact
- Cable spring

**Options**

- single (half) cylinder
- Without inside knob
- Without outside locking function
- OMEGA WT for enabling by means of transponder media
- Opening sensor for the automatic unlocking of the door from the inside

**Other applications**

- Automatic operation under motion detector control
- Centralized unlocking / locking under panel control
- Automatic unlocking / locking e.g. under building management system control
- Replacement for electrical door openers at doors that must be locked after daytime operation

**Note**

The components shown with dotted lines are application or combination options.

**Control unit dimensions**

W x H x T: 240 x 120 x 70 mm (height with screw fastening: 145 mm)
CEMO-NET online

CEMO-NET is the online version of the CEMO motor cylinder. For the online link, the proven control system is equipped with a network module allowing it to be operated over any IP network. The implementation of the online motor cylinder control and the door status visualization is either based on the CEStronics control software for single applications or on the CEStronics Control Terminal for multiple doors.

**CEMO-NET – Features**

- Same as CEMO motor cylinder
- Integration in an existing or new structured network environment (TCP/IP)

**Option**

- CEStronics Control Terminal software

**Scope of delivery**

- CEMO-NET control, single-user software license

**CEMO-NET control – Features**

- CEMO-NET control with integrated network module linked to the planned components IP address configured by the manufacturer
  The IP address of the respective doors must be indicated with the order.
- Network connection via standard network cable with RJ45 connector
- With the network module, the use of the standard timer is no longer possible and thanks to the virtual timer of the CEStronics software no longer required.
CEMO-NET online
Retrofit kit

For existing installations, the CEMO control systems can be easily upgraded to a CEMO-NET online version.

Retrofit kit - Features

- Same as CEMO-NET, supplied as kit complete with connecting cables
- Integration of the retrofit kit requires a software update including a replacement of the processor

Standard Ethernet
Interface: Ethernet 10Base-T or 100Base-TX (Auto-Sensing), RJ45 connector

Scope of delivery

- Retrofit kit with new housing cover
- Single-user software license
- Software update including processor

Option

- CEStronics Control Terminal software

CEMO-NET online
PoE

CEMO-NET PoE (Power over Ethernet) permits the integration of the motor cylinder in networks where the operating voltage is supplied through the network. The elimination of the 230 V/50 Hz installation and of the power supply unit reduces the fitting costs.

PoE - Features

- Same as CEMO-NET, but with Ethernet connection suitable for PoE networks

Power over Ethernet (PoE)
Interface: Ethernet 10Base-T or 100Base-TX (Auto-Sensing), RJ45 connector
Power consumption: 13W; power supply (PSE) min. 15.4W
Device class: 0 PD (IEEE 802.3af)
CEStronics control terminal

The CESTronics Control Terminal software shows all connected doors of a building in a structured matrix on the screen. The clear menu structure permits a fast and simple configuration of the connected motor cylinders.

Thanks to the online link, the current door status and the activities at the doors are displayed and stored immediately. Using your mouse, you can change the status of a specific door or the status of all doors at the same time. So you can e.g. unlock, lock or block all connected doors with a simple click.

Features

Configuration of each motor cylinder for:
– time commands
– door opening time
– limitation of locking turns
– door contact output
– alarm contact output
– standard operation, etc., etc.

- Virtual timer, freely parameterizable for the independent time control of each individual motor cylinder
- Grouping by location and allocation of doors within the building
- Monitoring of door status
- Easy to distinguish colour display of door status in a matrix
- Online status display for each door
- Automatic and manual mouse-click access to the functions: Unlock Door, Permanent Open mode, Lock Door, Daytime mode, Nighttime mode
- Display and acknowledgment of alarms and error messages
- Recording and feedback of door events, door status, and change of status of the motor cylinder for each connected door

Overview of all doors with door status indication in colour. Direct access to the standard control functions of each door plus function keys for the simultaneous control of all doors. Status indication for alarms and errors.
Clear editors for the simple integration into the building organization.

Configuration tool for special functions and special settings.

Freely definable event recording for each door.

Integrated virtual timer for the unlimited assignment of time-dependent control functions for the usual operating modes for each door.
CEMO Motor cylinder

Order data example

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>System</td>
<td>SP6</td>
</tr>
<tr>
<td>System name</td>
<td>SP 6xxxxx</td>
</tr>
<tr>
<td>Locking</td>
<td>Z1</td>
</tr>
<tr>
<td>Outside length</td>
<td>35.5</td>
</tr>
<tr>
<td>Inside length</td>
<td>31.5</td>
</tr>
<tr>
<td>Number of keys</td>
<td>3</td>
</tr>
<tr>
<td>Cylinder finish</td>
<td>MMV</td>
</tr>
<tr>
<td>Motor finish</td>
<td>MMCR</td>
</tr>
<tr>
<td>Timer</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

Please determine the inside and the outside length of the cylinder including armature (plate/rose). When indicating dimensions, remember that the cylinder must not lay inside the armature on the inside!

Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum cylinder length</td>
<td>27.5/31.5 (outside/inside)</td>
</tr>
<tr>
<td>Maximum cylinder length</td>
<td>Pursuant to CES extension table</td>
</tr>
<tr>
<td>Optional motor housing colours</td>
<td>polished brass colour, other finishes upon request</td>
</tr>
<tr>
<td>Maximum torque</td>
<td>2 Nm</td>
</tr>
<tr>
<td>Time for one opening (2 turns bolt + latch)</td>
<td>Approx 1.5 seconds</td>
</tr>
<tr>
<td>Connecting cable cross-section (10 x 0.14; 7 m long)</td>
<td>6 mm</td>
</tr>
<tr>
<td>Operating voltage – control unit</td>
<td>24 V/AC</td>
</tr>
<tr>
<td>Operating voltage – power supply</td>
<td>115/230 V 50 Hz</td>
</tr>
<tr>
<td>Control enclosure protection</td>
<td>IP 65, EN 60529</td>
</tr>
<tr>
<td>Cable screw connections</td>
<td>M16 x 1.5</td>
</tr>
<tr>
<td>Contact definition of command input Unlock Door</td>
<td>Zero potential make contact – push-button</td>
</tr>
<tr>
<td>Contact definition of command inputs Permanent Open mode / Daytime/Nightmode mode switchover / Lock Door / Door contact</td>
<td>Zero potential make contact – switch</td>
</tr>
<tr>
<td>Max. load of zero potential signal outputs</td>
<td>250 V / 5 A</td>
</tr>
</tbody>
</table>

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