CES OMEGA FLEX
Electronic cylinders

Double knob cylinder

Euro profile cylinders (Standard, AP and GS)

Swiss round cylinder (Standard)

Swiss round cylinders (AP and GS)
Euro profile cylinder

1. Outside (Locking side "S")
2. Inside (Knob side "K")

Euro profile cylinders AP and GS

1. Outside (Locking side "S")
2. Inside (Knob side "K")

Swiss round cylinder

1. Outside (Locking side "S")
2. Inside (Knob side "K")

Swiss round cylinders AP and GS

1. Outside (Locking side "S")
2. Inside (Knob side "K")

Article numbers

### Euro profile cylinder

<table>
<thead>
<tr>
<th>FH*</th>
<th>Standard</th>
<th>AP</th>
<th>GS</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>F815DK-x</td>
<td>F815DK-x-AP</td>
<td>F815DK-x-GS</td>
</tr>
<tr>
<td>yes</td>
<td>F915DK-x</td>
<td>F915DK-x-AP</td>
<td>F915DK-x-GS</td>
</tr>
</tbody>
</table>

### Swiss round cylinder

<table>
<thead>
<tr>
<th>FH*</th>
<th>Standard</th>
<th>AP</th>
<th>GS</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>F615DK-x</td>
<td>F615DK-x-AP</td>
<td>F615DK-x-GS</td>
</tr>
<tr>
<td>yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*FH=Fire retardant, suitable for fire protection doors up to T90
### Technical Data

#### Suitable locking media

**LEGIC**
- All locking media of type LEGIC prime and LEGIC advant, all locking media ISO 14443, HID iClass
- Additionally, all specified under “MIFARE”

**MIFARE**
- MIFARE® Classic® (1k/4k), MIFARE® DESFire® EV1 and EV2 (UID conforming to ISO 14443 and application), all ISO 14443 locking media (not MIFARE Ultralight® C)

#### Reading range
- Ca. 20 mm

#### Online radio frequency
- 868 MHz

#### Radio range to Access-Point
- Max. 25 m

#### Encrypted data transmission
- 128 bit/AES

#### Connection values
- Battery: 1 x Panasonic CR2 Industrial Lithium 3.0 V 850 mAh

#### Number of locking media
- Max. 5.000

#### Number of events
- Max. 5.000

#### Number of master media
- Max. 1 System-Master, max. 10 Program-Master, max. 10 Time-Master, max. 10 Release-Master, max. 10 Block-Master, max. 10 RF-Stick-Masters, max. 100 Emergency-Keys, RF-Ini-Master unlimited, RF-Trace-Master unlimited

#### Opening duration
- 2 - 180 seconds, adjustable (optional) (standard: 10 seconds)

#### Temperature range
- -25 °C bis +70 °C at 0...95% rH non-condensing

#### Prohibited atmospheres
- Not suitable for use in corrosive atmosphere (chlorine, ammonia, lime water)

#### Service life of the locking cylinder
- DIN EN 1303 class 6 conform

#### Programming
- With master media, offline with an RF-Stick, CEStronics Wireless online network; CEStronics V-NET virtual network

#### Finish
- Stainless steel

#### CE testing
- EN 300 220-1, 2; EN 300 330-1, 2; EN 301 489-1, 3; EN 60950-1, EN 62311

#### Classification
- DIN EN 15684:2013-01

#### Fire resistance rating
- T90 conforming to DIN EN 1634-1 (only for FH-electronic cylinder “F9…”)

### Classification conforming to DIN EN 15684:2013-01

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Use class</th>
<th>Duration frequency</th>
<th>Fire/Smoke resistance</th>
<th>Environment resistance</th>
<th>Mechanical locking security</th>
<th>Electronic locking security</th>
<th>System management</th>
<th>Attack resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification of electronic cylinders</td>
<td>1</td>
<td>6</td>
<td>A/B*</td>
<td>4</td>
<td>A</td>
<td>F</td>
<td>0/1/3**</td>
<td>0/2***</td>
</tr>
</tbody>
</table>

* (Fire/Smoke resistance)
- A  Standard version (= with smoke protection)
- B  FH version (T90)

** (System management)
- 0 For NoTime variants
- 1 For variants with deactivated storage of access events
- 3 For TIME-, NET- or V-NET-Variants

*** (Attack resistance)
- 0 Standard option
- 2 Options with burglary protection (VdS and SKG***)

---

www.ces.eu
## Extensions

<table>
<thead>
<tr>
<th>Inside (K) / All dimensions in mm</th>
<th>(AP and GS from 32.5)</th>
<th>(FH variants from 32.5)</th>
<th>Outside (S) / All dimensions in mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>87.5 -- 72.5 -- 62.5 -- 32.5 -- 27.5 -- 62.5 -- 72.5 -- 87.5</td>
<td>Max. Axial dimension 87.5 mm. Extension in 5 mm steps.</td>
<td>Max. Axial dimension 87.5 mm. Extension in 5 mm steps.</td>
<td></td>
</tr>
</tbody>
</table>

Max. total length 175 mm.

## Variants

<table>
<thead>
<tr>
<th>Variant</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LINE</strong></td>
<td>(/N) &quot;NoTime&quot; (No time profiles, no events available) Offline</td>
</tr>
<tr>
<td>(Authorisations are stored in the device)</td>
<td>(/T) &quot;Time&quot; (Time profiles and events available) Offline</td>
</tr>
<tr>
<td><strong>V-Net</strong></td>
<td>(/NET) &quot;Net&quot; (Wireless online network, Time profiles and events available) Online</td>
</tr>
<tr>
<td>(Authorisations are stored in the locking media)</td>
<td>(/VA) &quot;Validation&quot; (Validation function, wireless online network, time profiles and events available) Online</td>
</tr>
</tbody>
</table>

## Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SKG</strong>*</td>
<td>Anti-drilling and anti-pulling protection conforming to SKG ***</td>
</tr>
<tr>
<td><strong>VdS</strong></td>
<td>Anti-drilling and anti-pulling protection conforming to VdS 2156 BZ+ (not possible for variant N)</td>
</tr>
<tr>
<td><strong>WP</strong></td>
<td>Weatherproof conforming to IP65</td>
</tr>
<tr>
<td><strong>ST</strong></td>
<td>Soft touch coating of the knobs</td>
</tr>
</tbody>
</table>

## Battery Life

<table>
<thead>
<tr>
<th>Usage profile of the electronic cylinders</th>
<th>Battery life*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LEGIC</strong></td>
<td><strong>MIFARE</strong></td>
</tr>
<tr>
<td>Standby without access operations</td>
<td>up to 2 years</td>
</tr>
<tr>
<td>Standby and up to 10 access operations per day</td>
<td>up to 1.5 years</td>
</tr>
<tr>
<td>Max. number of opening/closing operations per battery</td>
<td>up to 34,000</td>
</tr>
</tbody>
</table>

*The information applies to an ambient temperature of 20 °C. Deviating temperatures, usage frequency and parameter settings of the locking devices can result in strongly divergent values.

## Ordering Example

<table>
<thead>
<tr>
<th>Article number</th>
<th>Variant</th>
<th>Options</th>
<th>Finish</th>
<th>Length K</th>
<th>Length S</th>
</tr>
</thead>
<tbody>
<tr>
<td>F815DK-x-AP</td>
<td>NET</td>
<td>ST</td>
<td>Standard = 0</td>
<td>(Knob side)</td>
<td>(Locking side)</td>
</tr>
</tbody>
</table>

Subject to changes without notice. WEEE-Reg.-Nr. DE85643571

---

MIFARE, MIFAREClassic, MIFARE, MIFAREUltralight and MIFAREDESFire are registered trademarks of NXP B.V. and are used under license.