



# Euro Profile Cylinder

**CYEM / CYEU / CYFM SERIES**



**EN1303 SPECIFICATION**

UNISON HARDWARE, INC.  
[www.inoxproducts.com](http://www.inoxproducts.com)

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## TABLE OF CONTENTS

EN1303 Standard Explained .....	Page 1
How to Order .....	Page 3
Euro Cylinder CYFM Series .....	Page 4
Euro Cylinder CYEU Series .....	Page 6
Euro Cylinder CYEM Series .....	Page 8

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## Cylinder Locks

### EN1303: 2005

#### SCOPE

The European standard to which this document relates applies to cylinders intended for use on locks in buildings. It identifies just one grade for category of use, three grades of durability, two grades of fire resistance, four grades of corrosion and temperature resistance, six grades of key related security based on design requirements, and three grades of attack resistance based on mechanical performance tests.

The suitability of cylinders for use on fire/smoke door assemblies is determined by fire performance tests conducted in addition to the mechanical performance testing required by the European standard. Suitability for use on fire resisting doors may not be essential in every situation.

On occasions there may be a need for additional functions within the design of the cylinder not covered by the European standard. In such cases purchasers should ensure that the products are suitable for their intended use. This is particularly important when the operation of such additional functions is safety related.

#### CLASSIFICATION

EN1303: 2005 classifies cylinders for locks using an 8 digit coding system. A broadly similar classification system is used for other building hardware product standards. Each digit refers to a particular feature of the product measured against the standard's performance requirements.

#### EN1303: 2005

Digit 1  
Category of use

One category is identified:

Grade1: Keys shall resist a torque of 2.5Nm and still be usable.

Digit 2  
Durability

Three grades are identified according to the number of test cycles achieved:

Grade 4: 25,000 cycles

Grade 5: 50,000 cycles

Grade 6: 100,000 cycles

Digit 3  
Door mass

No requirement.

Digit 4  
Fire resistance

Two grades are identified as follows:

Grade 0: Not suitable for fire/smoke resistant door assemblies.

Grade 1: Suitable for fire/smoke resistant door assemblies subject to satisfactory assessment of the contribution of the cylinder to the fire resistance of the specified fire/smoke door assemblies. Such assessment is beyond the scope of this European standard (see EN1634-1).

inox® CYFM / CYEU/ CYEM Series Cylinders  
are tested to the following classification

1	6	0	1	0	C	5	2
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inox® CYFM / CYEU/ CYEM Series Cylinders

1	6	0	1	0	C	5	2
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inox® CYFM / CYEU/ CYEM Series Cylinders

1	6	0	1	0	C	5	2
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inox® CYFM / CYEU/ CYEM Series Cylinders

1	6	0	1	0	C	5	2
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Successfully passed and exceeded 240-minutes fire test of metal fire door assemblies to EN1634-1:2014

Digit 5  
Safety

No requirement.

Digit 6  
Corrosion and temperature resistance

Four grades are identified as follows:

Grade 0: No corrosion or temperature resistance requirements.

Grade A: BS EN 1670 Grade 3 corrosion resistance (96 hours NSS):  
no temperature resistance requirement.

Grade B: No corrosion resistance requirement:  
resistance to -20/+80°C temperature extremes.

Grade C: BS EN 1670 Grade 3 corrosion resistance:  
resistance to -20/+80°C temperature extremes

**Note:**

- No distinction is made between the inside and the outside of either the cylinder and/or the door.
- On completion of the test, the cylinder must operate using a maximum 1.5 Nm torque on the key.

Digit 7  
Key related security

Six grades are identified and the principal requirements are summarised in Table 1 below:

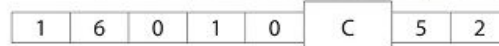
Table 1: Key related security	Grade					
	1	2	3	4	5	6
Minimum number of effective differs	100	300	15 000	30 000	30 000	100 000
Minimum number of movable levers, pins, discs, etc.	2	3	5	5	6	6
Coding on key could disclose combination	Yes	Yes	No	No	No	No
Torque resistance of plug	2.5Nm	5Nm	15Nm	15Nm	15Nm	15Nm

Digit 8  
Attack resistance

Three grades are identified and the principal requirements are summarised in Table 2 below:

Table 2: Attack resistance	Grade		
	0	1	2
Resistance to drilling (net drilling time)	-	3 mins	5 mins
Resistance to chisel attack (number of defined blows)	-	30	40
Resistance to twisting attack (number of defined twists)	-	20	30
Resistance to plug/cylinder extraction (pull load)	-	15 kN	15 kN
Torque resistance of plug/cylinder	-	20 Nm	30 Nm

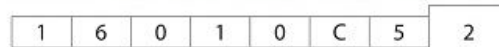
**inox® CYFM / CYEU/ CYEM Series Cylinders**



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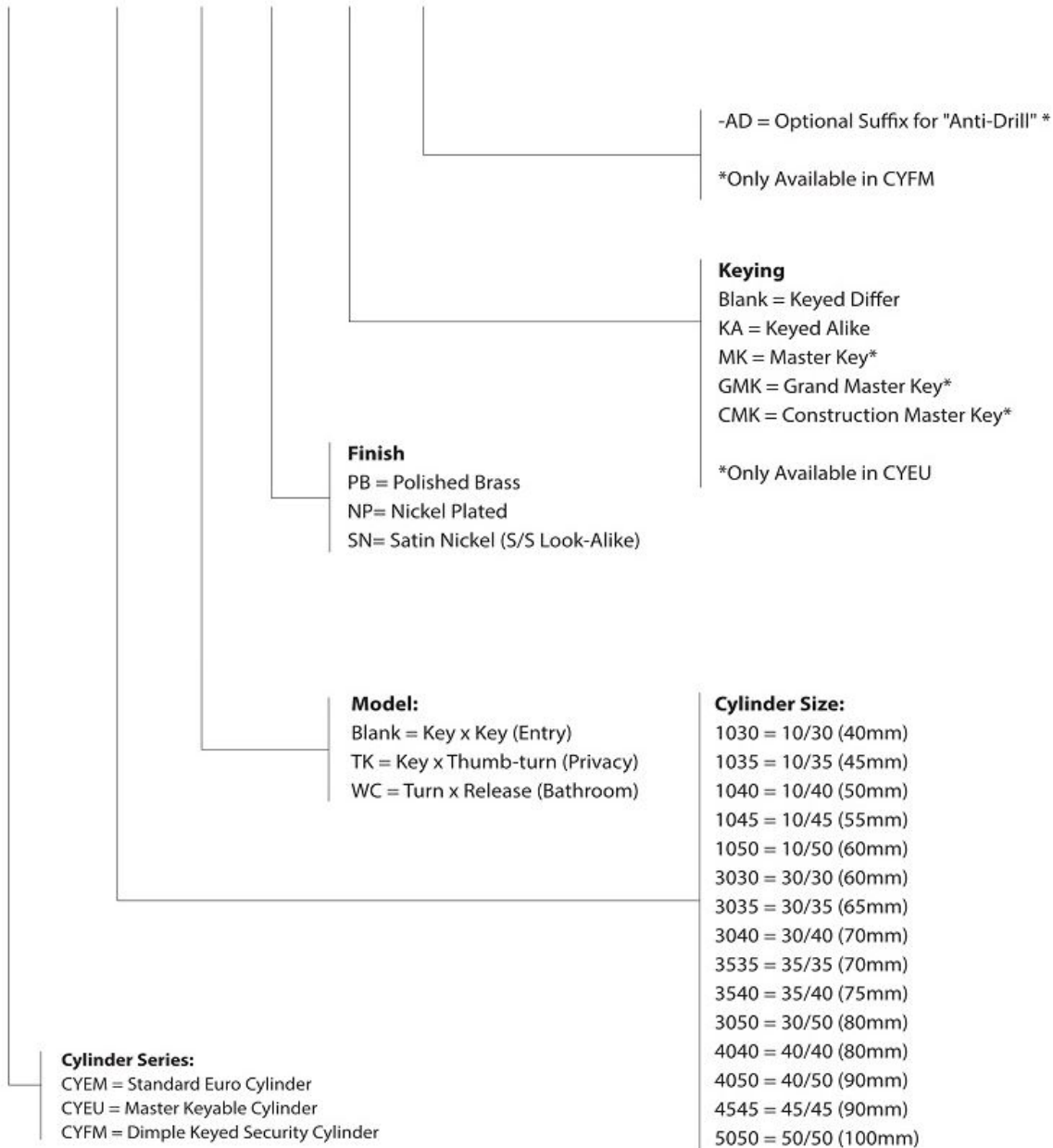
**CE MARKING**

EN1303 has not been designated as a harmonised product standard under the Construction Products Directive and therefore CE marking of cylinders to this standard is NOT permitted.

## How to Order

### Product Identification

CYEM -3030 TK -SN -KA -AD



## Euro Cylinder CYEM Series

### Application

INOX CYEM series cylinder is standard euro cylinder designed for INOX or any euro cylinder fitted mortice lock to provide necessary security for commercial or residential applications

### Specifications and Features

- Standard euro profile dimension according to DIN18252
- Solid brass body and keys
- Various lengths available for different door thickness
- Symmetrical and asymmetrical variants available to work with different lock installation positions
- Advanced key differ combination security with 5 pin design
- 3 keys per cylinder as standard
- Enhanced attack resistance provided by INOX Security Escutcheons

### Standards and Certification



Successfully type-tested for conformity to all of the requirements of EN1303:2005



Successfully passed 240-minutes fire test of metal door assemblies to EN1634-1:2014



All test performed independently and certified by Exova/Warringtonfire/Warrington APT. Test reports and/or certificates are available on request

### EN1303:2005 Classification

1	6	0	1	0	C	5	2
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### Finishes

- Satin Nickel (SN)
- Nickel Plated (NP)
- Brass Polished (BP)
- \* Other finish available on request

### INOX Mortice Lock Options

- MB7200 Series
- MB8500 Series
- MD7200 Series
- MD8500 Series

### INOX Security Escutcheons



EC-SE30



EC-SE35

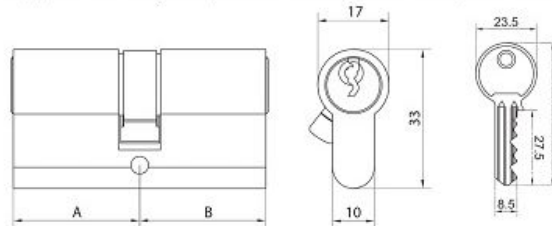
EC-SE30: Security Escutcheon for Euro Cylinder  
 EC-SE35: Security Escutcheon for Euro Cylinder with Cover Protection Rose

## Euro Cylinder CYEM Series

## Available Functions

**Double Profile Cylinder**

Application: Keyed operation from either side (inside or outside).

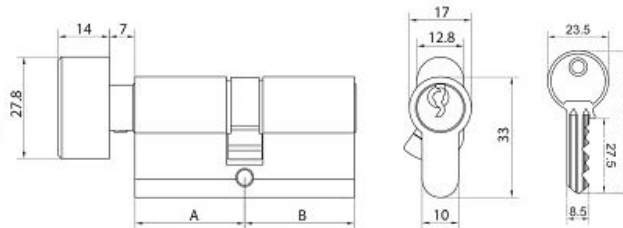
**Item No**

CYEM-3030  
CYEM-3035  
CYEM-3535  
CYEM-4040

\* Dimensions in mm

**Double Profile Cylinder with Thumb-turn**

Application: Keyed operation from one side (outside) and thumb-turn operated from the other side (inside).

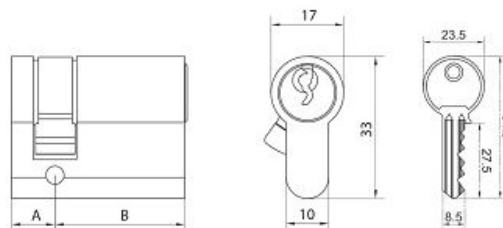
**Item No**

CYEM-3030TK  
CYEM-3035TK  
CYEM-3535TK  
CYEM-4040TK

\* Dimensions in mm

**Single Profile Cylinder**

Application: Keyed operation from one side (outside) only.

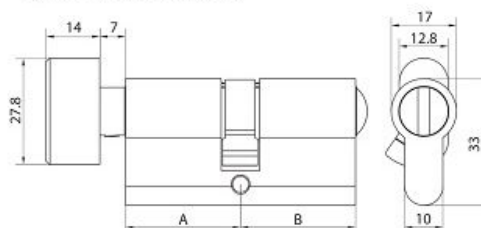
**Item No**

CYEM-1030  
CYEM-1035  
CYEM-1040  
CYEM-1045

\* Dimensions in mm

**Privacy/Bathroom Cylinder**

Application: Thumb-turn operated from inside and emergency release slot operated from outside

**Item No**

CYEM-3030WC  
CYEM-3035WC  
CYEM-3535WC  
CYEM-4040WC

\* Dimensions in mm