ISEO ULTIMATE ACCESS TECHNOLOGIES

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C.F./P. IVA/n. Reg. Imp. di BS IT 08499190018
Cap. Soc. Del. € 24.429.800,00 int. versato
CCIAA Brescia n. REA 447181

IT AEOF 19 1577

DIN18252:2018 – Mechanic and Mechatronic cylinders

Classification key

EN
United Kingdom

The classification reached by the product is shown on the product itself or on the minimum packaging and in the certificate issued by an independent body

Type of cylinder (1st digit)

- **M** Mechanical cylinder according to EN1303
- **E** Mechatronic cylinder according to EN15684

Security requirements (2nd digit)

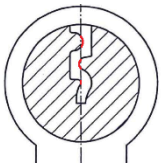
- **0** No security requirements
- **G** Security requirements for individual system according to DIN 18252:2018 § 6.2
- **S** Security Requirements for MKS according to DIN 18252:2018 § 6.2 and 6.4
- **E** Security requirements for mechatronic cylinders according to DIN 18252:2018 § 6.3

6.2 Requirements for individual system

6.2.1 The differences between the highest and lowest step in a row must be at least three steps.

6.2.2 At least one pin compressed shall protrude at least 1 mm from the keyway; in case of different blocking systems at least one detainer shall block the system in a secure way.

6.2.3 The keyway should be designed in a way that at least two profile lines touch or overlap the central axle. If two profile lines don't touch or overlap the central axle, the cylinder should be designed in a way to prevent the introduction of opening tools (This is considered to be fulfilled if, for example, there are at least four movable elements in each two rows of detainers).



6.2.4 The minimum number of effective differs per key profile is based on EN1303:2015 key related security grades 4 ÷ 6.

6.2.5 There should be at least two detainers specifically designed able to simulate a release of the cylinder plug in the event of an attempt to unlock it.

6.2.6 To increase the key related security, pins with different lengths and springs with different compression rate should be used.

6.2.7 Only detainers which are moved into predefined positions by the key and which prevent the locking process if these positions are not reached or exceeded shall be counted.

6.2.8 It shall be ensured that the delivery of key copy, cylinders and locking plans may only be supplied after presentation of the security card.

6.3 Requirements for mechatronic cylinders

6.3.1 Mechatronic profile cylinders must at least comply with electronic key related security (6th digit) class E according to EN 15684:2012 or class C according to EN 15684:2020

6.3.2 It shall be ensured that the delivery of original components provided with access authorisations and data for an existing locking system or a secured individual locking system may only be supplied after presentation of the security card.

6.4 Requirements for MKS

6.4.1 Profile cylinders for locking systems must fulfil the requirements according to § 6.2.1 to § 6.2.8

6.4.2 Profile cylinders for locking systems must be equipped with all detainers provided for in the locking system. required in the locking system to ensure 30,000 or 100,000 effective differences, according to the key profile required.

6.4.3 The length of the pins must correspond to at least twice the step

6.4.4 For the detaining element without pins EN1303:2015 § 4.8.5 operation of security mechanism (inter-passing) shall apply

6.4.5 Key profiles which have been dedicated for MKS purpose by the manufacturer shall be used.

6.4.6 Every MKS plan shall containing at least:

- *Key number, cylinder number*
- *System type and designation*
- *details of locking cylinder lengths*
- *Functional diagram of key and locking cylinder*
- *Special functions/equipment*
- *Number of locking cylinders and keys*

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Key related security (3rd digit)

0 No key related security requirement

4 Meets the requirement of
- *EN1303:2015* *key related security (7th digit)* *Grade 4*
- *EN15684:2012* *mechanical key related security (5th digit)* *Grade E*
- *EN15684:2020* *mechanical key related security (5th digit)* *Grade 4*

5 Meets the requirement of
- *EN1303:2015* *key related security (7th digit)* *Grade 5*
- *EN15684:2012* *mechanical key related security (5th digit)* *Grade E*
- *EN15684:2020* *mechanical key related security (5th digit)* *Grade 5*

6 Meets the requirement of
- *EN1303:2015* *key related security (7th digit)* *Grade 6*
- *EN15684:2012* *mechanical key related security (5th digit)* *Grade F*
- *EN15684:2020* *mechanical key related security (5th digit)* *Grade 6*

Attack resistance (4th digit)

0 No attack resistance requirement

A Meets the requirement of
- *EN1303:2015* *attack resistance (8th digit)* *Grade A*
- *EN15684:2012* *attack resistance (8th digit)* *Grade 1 without plug extraction test*
- *EN15684:2020* *attack resistance (8th digit)* *Grade A*

B Meets the requirement of
- *EN1303:2015* *attack resistance (8th digit)* *Grade B*
- *EN15684:2012* *attack resistance (8th digit)* *Grade 2 without plug extraction test*
- *EN15684:2020* *attack resistance (8th digit)* *Grade B*

C Meets the requirement of
- *EN1303:2015* *attack resistance (8th digit)* *Grade C*
- *EN15684:2012* *attack resistance (8th digit)* *Grade 1*
- *EN15684:2020* *attack resistance (8th digit)* *Grade C*

D Meets the requirement of
- *EN1303:2015* *attack resistance (8th digit)* *Grade D*
- *EN15684:2012* *attack resistance (8th digit)* *Grade 2*
- *EN15684:2020* *attack resistance (8th digit)* *Grade D*

Panic function (5th digit)

0 No panic function requirement

F1A The cam of a cylinder F1A in the pull-off position must be within the ± 30 ° see figure 1

F1B The cylinder F1B the pull-off position shall have the within the dimensions shown in figure 2

F2 The cam of a cylinder F2 shall not exceed a frictional torque of 5 Ncm in any position

R1 The cam of a cylinder R1 shall automatically return in the range “a” from 15°÷150° and “b” from 210°÷345° figure 3

R2 The cam of a cylinder R1 shall automatically return in the range “a” from 250°÷345° and “b” from 110°÷250° figure 4

R3 The cam of a cylinder R1 shall automatically return in the range “a” from 25°÷150° and “b” from 210°÷335° figure 5

FZG The cam of a cylinder FZG shall not exceed a frictional torque of 5 Ncm in any position; after complete withdrawal of the key under a load of 65 N on the cam, the cam shall still be able to rotate

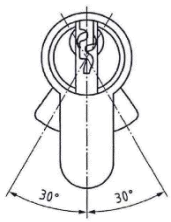

figure 1

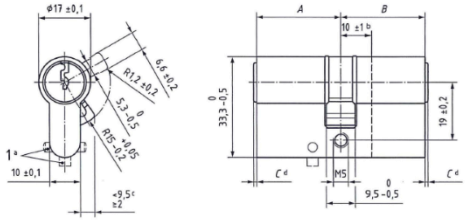

figure 2

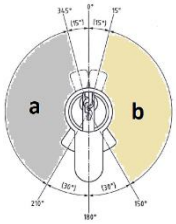

figure 3

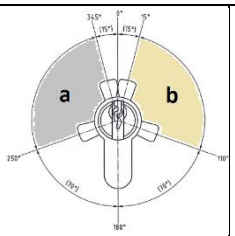

figure 4

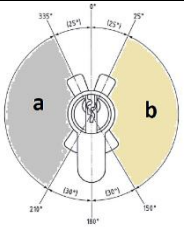

figure 5