

DIN EN 16864:2017-11 (E)

Building hardware - Mechatronic padlocks - Requirements and test methods

Contents	Page
European foreword	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms, definitions and symbols	7
4 Requirements	10
Table 1 -- Bump and vibration requirements	11
Table 2 -- Environmental resistance MP	12
Table 3 -- Environmental resistance of electronic key for MP	13
Table 4 -- Mechanical codes	13
Table 5 -- Code attack resistance	14
Table 6 -- Audit trail and time zone	14
Table 7 -- Security requirements	16
5 Testing, assessment and sampling methods	18
Figure 1 -- Drill test rig	26
Figure 2 -- Shackle twisting test	27
Figure 3 -- Extraction of plug	28
Figure 4 -- Torque test	29
Figure 5 -- Shackle pulling arrangement	30
Figure 6 -- Sawing test	31
Figure 7 -- Shackle cutting test	32
Table 8 -- Shackle attack requirements	32
Table 9 -- Shackle dimensions	33
Figure 8 -- Gauge for measuring shackle accessibility	33
Figure 9 -- Impact on padlock body	34
Figure 10 -- Impact on padlock shackle	34

Figure 11 -- MP mounting arrangement	35
6 Classification system	37
Table 10 -- Classification system	38
Table 11 -- Examples of classification of MP	39
Table 12 -- Examples of classification of electronic key	39
7 Marking	39
Annex A (normative) Tool sets for attack resistance tests	40
Table A.1.....	40
Table A.2.....	41
Table A.3	42
Annex B (normative) Table of test procedures	43
Table B.1 -- Test procedures for MP	43
Table B.2 -- Test procedures for electronic keys	44
Bibliography	45