tapkey SMART LOCK

Technical Data

Variants	› Tapkey Smart Lock double cylinder (DZ) and Tapkey Half Cylinder (HZ) Even the standard version includes all mechanic and electronic security features: — Body and core drilling protection — Separate control electronic for actor in the core
	› Tapkey Smart Lock KZSV (German: Kernziehschutzverlängerung) — For assembly in fittings with core pulling protection — Protruding outer shaft by 8.5 mm
	› Tapkey Smart Lock CH (22 mm Swiss round profile)
	› Tapkey Smart Lock euroswiss profile

On special request	› Tapkey Smart Lock EE double cylinder (emergency exit) Application in escape and emergency routes where a well-defined cylinder cam position is required. Also available without inside knob (EE-OI).
	› Tapkey Smart Lock OI (without inside knob) blind cylinder on the inside
	› Tapkey Smart Lock BS (reader on both sides) reading of NFC Transponders and smartphones also on the inside
	› Tapkey Smart Lock 382 lever cylinder (e.g. for letter boxes) — length 31.8 mm, for mounting holes ø 26 × 22 mm — 90 ° turning movement with self-holding end positions — adjustable lever position: 4 × 90 °

Technology	› 13,56 MHz Mifare

Feature combinations

Variants	Code	DZ	HZ	EE	OI	BS	KZSV	EU-CH	CH
Double cylinder	DZ			✔	✔	✔	✔	✔	✔
Half cylinder	HZ		✘				✔	✔	✔
EE (Emergency Exits)	EE				✔	✘	✔	✔	
without inside knob	OI						✔	✔	✔
Reader on both sides	BS						✔	✔	✔
core pulling protection	KZSV							✔	✔
Euroswiss profile	EU-CH								
Swiss round profile	CH								

✔ . . . . . available   ✘ . . . . . not available

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Position of cylinder cam
(only for Tapkey Smart Lock EE)

› The Tapkey Smart Lock EE has a spring driven reset mechanism to turn the cylinder cam to a fixed position.
› Due to the cylinder construction the reset mechanism does not work within the angular dead centers $12^{00} \pm 20\,°$ and $6^{00} \pm 45\,°$.
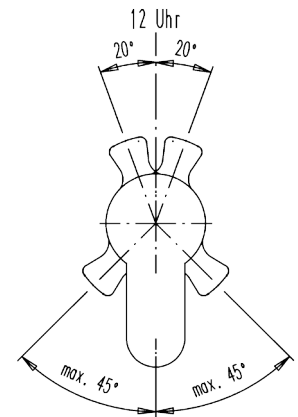
Power supply

› Battery with 2 lithium cells 3.0 Volt
› Type CR2 (Li-MnO$_2$ system)

Battery life time and
data preservation

› At room temperature (+20 °C):
  — Up to 25.000 locking cycles or
  — Up to 3 years in case of non-use

› Multilevel alarm system in case of voltage drop
› 10 years data preservation without battery

Cylinder length

› Maximum outer length: 80 mm
  — Models EE & BS require at least 30 mm outer length
› Maximum inner length: 80 mm
  — Models EE & BS require at least 30 mm inner length

› For backset < 30 mm the application is to be checked

Allowed combinations
(measurements in mm)

inside outside	10	12.5	15	17.5	20	22,5	25	27.5	30	35	40...80*
27.5	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
30	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
35	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
40...80*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ . . . . . available   ✗ . . . . . not available

* in 5 mm steps

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Technical Data

Knobs	› Outside knob: stainless steel size: ø 37.5 mm, length 44.8 mm › Inside knob: pot metal size: ø 32 mm, length 30 mm › For double cylinder with two-side readability — Both knobs: stainless steel size: ø 37.5 mm, length 44.8 mm
Time/Date	› Buffering typically 1 minute (in case of battery change) › Clock drift at room temperature: ±10 minutes/year at −25 °C and +65 °C: −50 minutes/year
Durability	› At least 100.000 cycles (according DIN EN 1303 and EN 15684 grade 6)
Signalling	› Optical signalling (red/green/blue) › Circular lighting segments in knob cover
Clutch duration	› Default: 8 seconds
Approvals and certifications	› Test fire resistance T90 (ift test report 15-000580) * › Certification according to EN 15684 (PIV test report 49-2/15)

Digit	1	2	3	4	5	6	7	8
Tapkey Smart Lock	1	6	B	4	A	F	3	2

› Tested as free-wheeling cylinder according to test directive FZG, version 2010_01 of PIV (test report 20-8/15)

* Fire resistance test T90 shall not apply to the Swiss round cylinder Tapkey Smart Lock CH and not for the versions Tapkey Smart Lock 382

Technical Data

Environmental	
	› Temperature: –25 °C to +65 °C (class 4 EN 15684)
	› Humidity: 20–99 % no condensation (class 4 EN 15684)
	› Protection class (PIV test report 44-3/15)
	— IP66 (outside knob) for all variants
	— IP 65 (complete Europrofile cylinder, all variants)
	› Anticorrosive according to DIN EN 1670 class 3 and grade 4 of EN 15684
	› SO_2 corrosion test according to VdS 2156-2 and DIN EN ISO 6988 (15 cycles with 0.2 l SO_2) in preparation
	› According to VdS guideline 2156-2 the Tapkey Smart Lock is designed for a weatherproof installation

Operation	
	› Via Android phone (BLE & NFC); Android 4.4 or higher
	› Via iPhone (BLE); iOS 9 or higher
	› Google account or Tapkey ID required

Events	
	› Ring buffer for the latest 1.000 events

Inductive transponder interface	
	› Reading range: up to 3 cm
	› Frequency: 13.56 MHz
	› Field strength in 10 m distance: < 42 dB µA/m
	› In conformity with ETSI EN 300 330
	› Supports passive transponders according to ISO 14443 A
	› Supports NFC according to ISO/IEC 18092
	› Encryption: Mifare DESFire EV2: AES-128 Bit

Transponder types	
	› Tapkey NFC Tag
	› Tapkey NFC Card
	› Tapkey NFC Sticker
	› Tapkey NFC Wristband

Storage of access authorizations	
	› Android phones (BLE & NFC) and iPhone (BLE): unlimited permissions
	› NFC Transponders: up to 12 permissions

ℹ **These data correspond to the actual development status and are subject to change at any time without notice.**