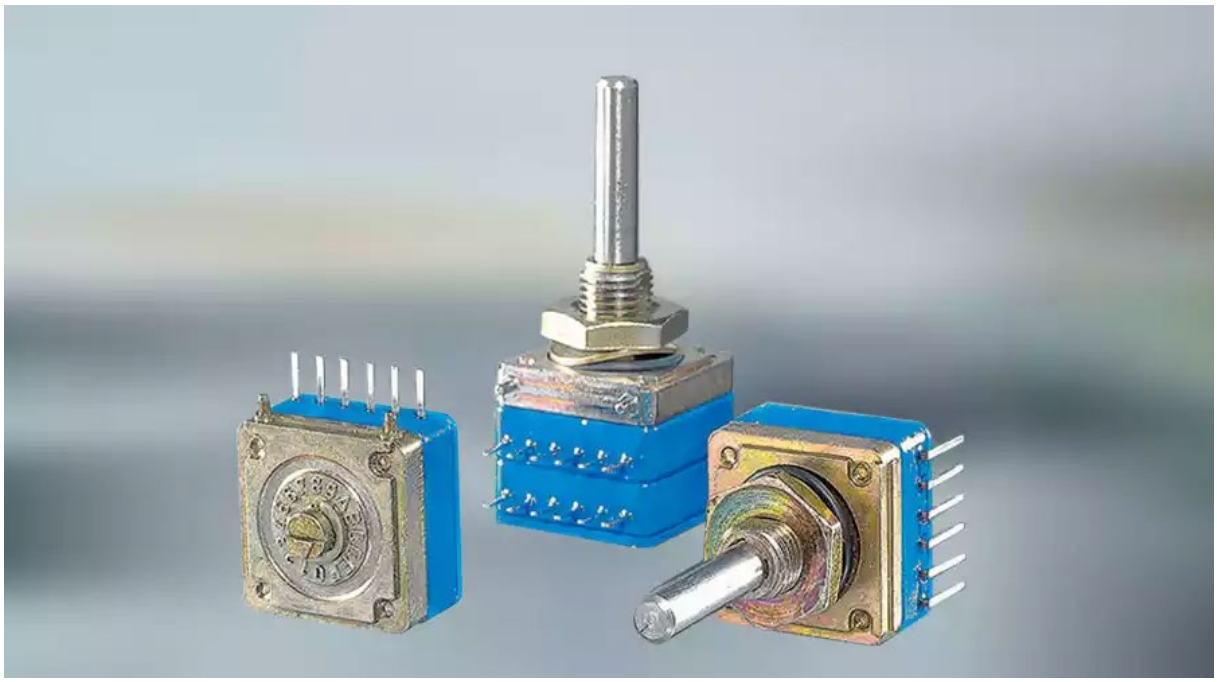
SC17 – HMI-Switches



DESCRIPTION

Multi-purpose miniature code switch with many standard codes and detent angle variations.

- Standard codes:
  – BCD with even parity.
  – BCD with even parity and direct control of 7 segment displays.
  – BCD-complement: 2 out of 5, Excess 3, Gray, Aiken, Dezimal 0–9 (1 out of 10) and hexadecimal.

- Suitable for cleaning in ultrasonic bath.
- Same construction enables to use code switches and step switches (1 out of 10) together.
- Direct control of 7 segment displays simplifies the switching arrangement.
- Miniature dimensions: 17,0 x 17,0 x 11,4 mm – 1 wafer.
- Direct soldering to PC boards.
- Shaft parallel or vertical to PC board (single-wafer version).
- Operating by shaft or screwdriver slot.

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Special versions

- Version with self-returning detent mechanism on request.
- Version with thread M10 x 0,75 and shaft 6 mm.
- Type SCD17, detent angle 36°, with 2 wafers to be operated independently.
  Wafer 1 operated in normal shaft position,
  Wafer 2 operated by pushing the shaft.
  After operation the switch returns to normal position.

TECHNICAL DATA

CONSTRUCTION AND MECHANICAL DATA , TYPICAL VALUES (T=23°C)

NUMBER OF WAFERS MAX.	3 wafers
SWITCHING COMBINATIONS PER WAFER **DESIGN B, DETENT ANGLE 60°** **DESIGN D, DETENT ANGLE 36°** **DESIGN E, DETENT ANGLE 30°** **DESIGN H, DETENT ANGLE 22.5°** **DESIGN N, DETENT ANGLE 18°**	 Code on request See code tables Code on request See code tables Code on request
CONTACTS	Soldering pins
MOUNTING	Soldering, holding clamps or central mounting
STOPS	Fixed or without stop
OPERATING TORQUE	Typically 3 up to 10 Ncm
CONTACT MATERIAL	Au
INSULATING MATERIAL (WAFER)	Polybutylenterephthalate, PBTP; Code PB
INSULATING MATERIAL (ROTOR)	Epoxide glass laminate, EP
SOLDERING TIME AND TEMP.	5 s at 260°C

ELECTRICAL DATA, TYPICAL VALUES (T=23°C)

SWITCHING POWER MAX.	3 VA/W max.;
SWITCHING CURRENT MAX.	100 mA max.;
REST CURRENT MAX. AT 20°C	0.5 A

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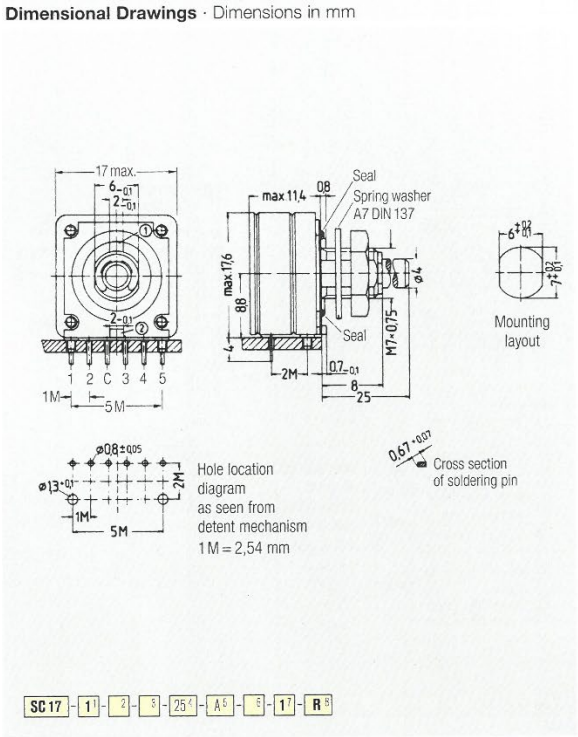
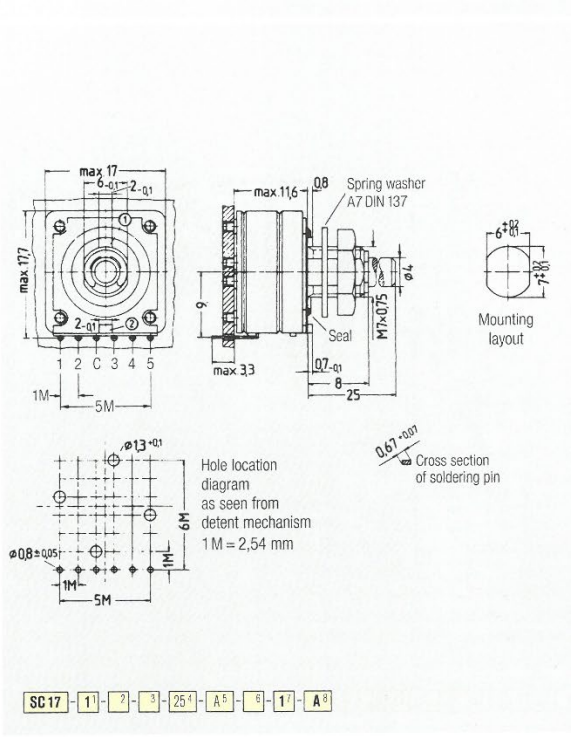
DIMENSIONS

The bold-typed data in the yellow order blocks remain unchanged.
Normal-typed data matches the drawings and can be modified according to your wishes.
Blanks need to be completed according to the ordering details on the inside front cover.

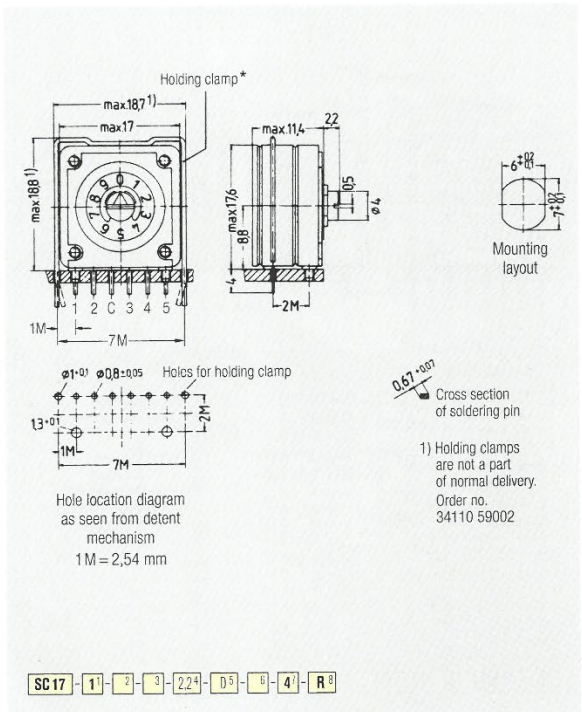
Dimensional Drawings · Dimensions in mm



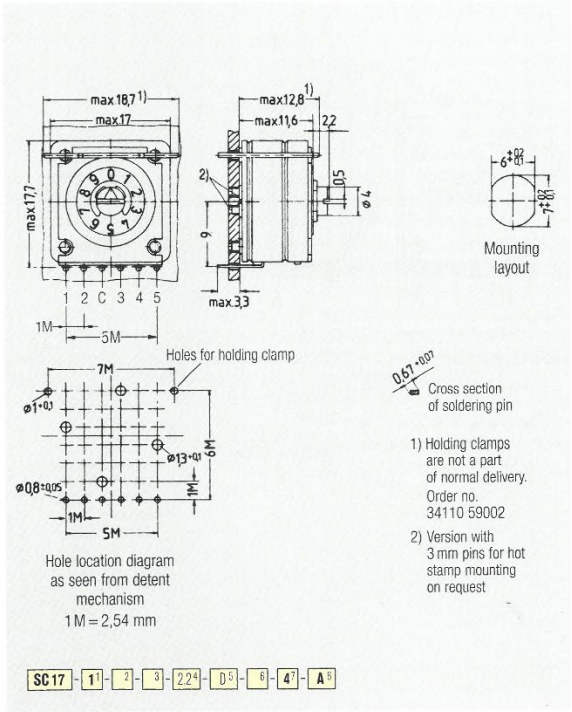
SC17 · Shaft version with single-wafer. Radial mounting



SC17 · Shaft version with single-wafer. Axial mounting



SC17 · Screwdriver slot version with single-wafer. Radial mounting



SC17 · Screwdriver slot version with single-wafer. Axial mounting

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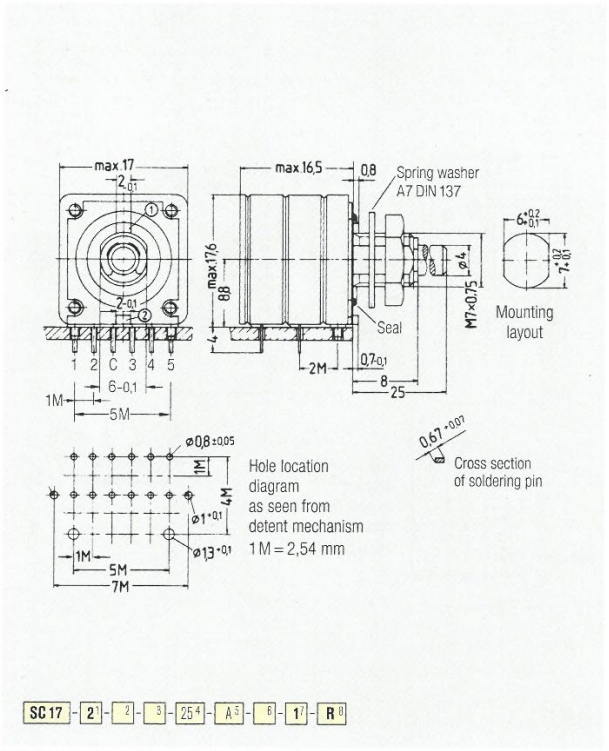
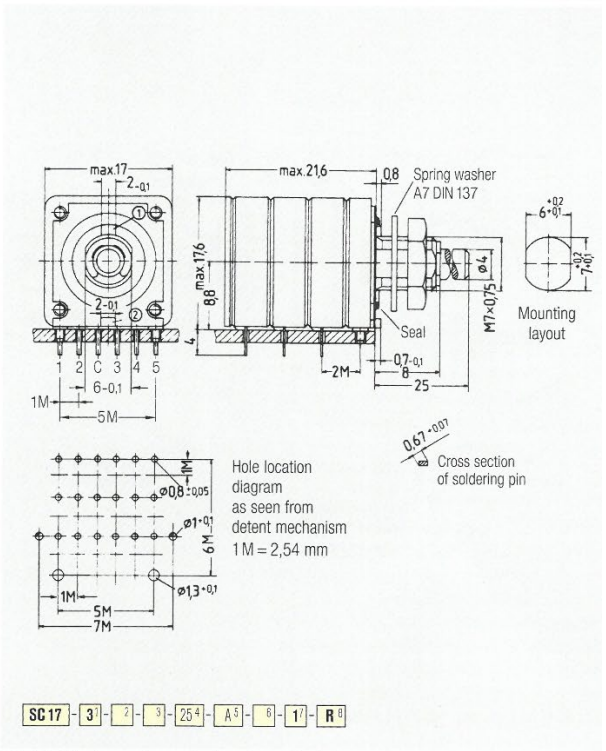
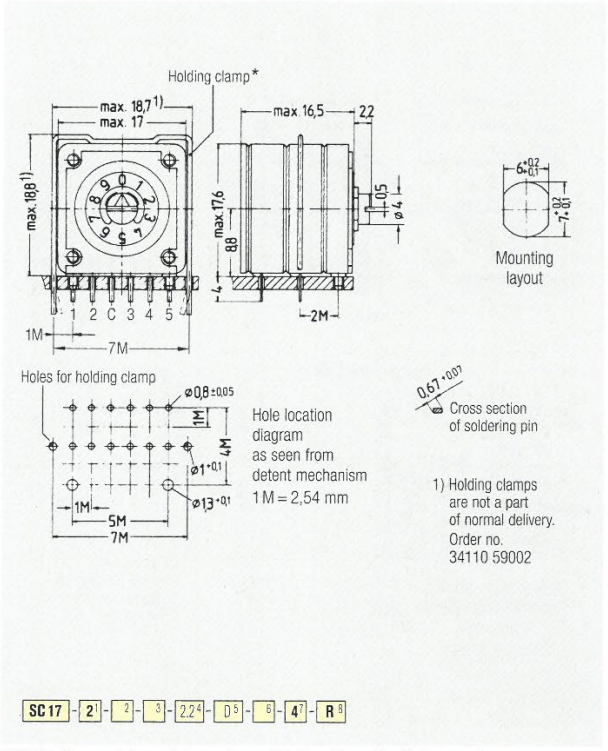
Dimensional Drawings · Dimensions in mm



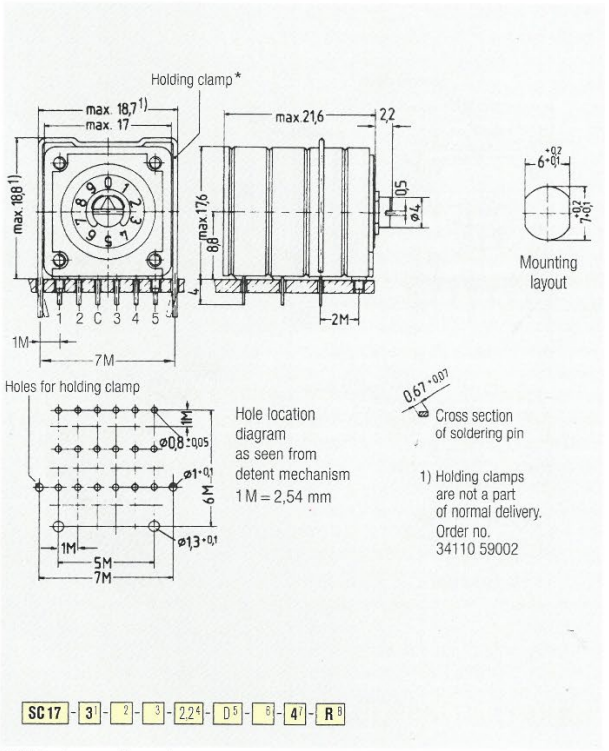
SC17 · Shaft version with 2 wafers. Radial mounting



SC17 · Shaft version with 3 wafers. Radial mounting



SC17 · Screwdriver slot version with 2 wafers. Radial mounting



SC17 · Screwdriver slot version with 3 wafers. Radial mounting

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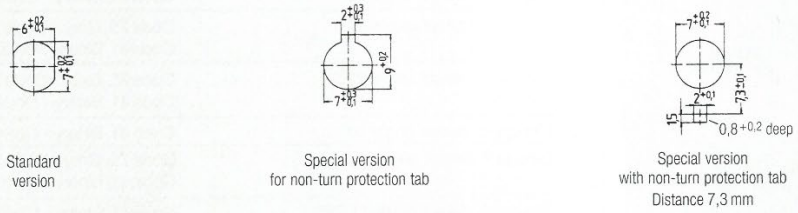
Dimensional Drawings and Codes · Dimensions in mm

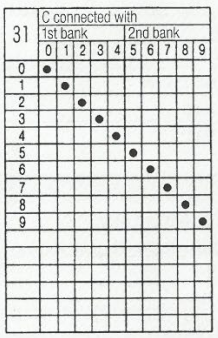


Standard version

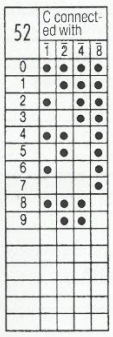
Special version for non-turn protection tab

Special version with non-turn protection tab Distance 7,3 mm

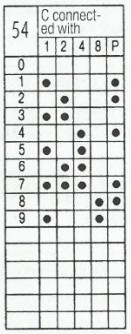
SC17 · Mounting layouts for non-turn protection versions



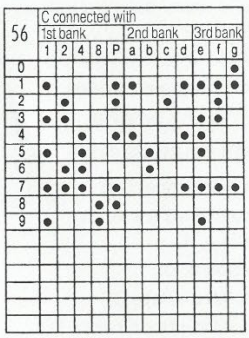
Code 31
Decimal 0 to 9



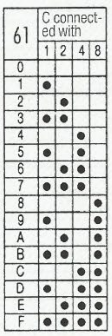
Code 52
BCD-Complement



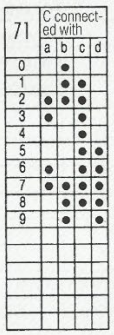
Code 54
BCD + even parity



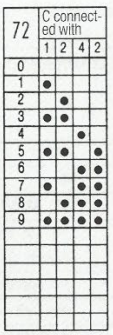
Code 56
BCD + even parity + 7 segment



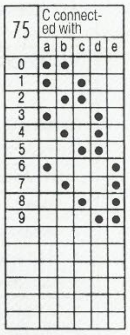
Code 61
Hexadecimal



Code 71
Excess 3, Gray



Code 72
Aiken



Code 75
2 of 5

For switches with two or three differently coded wafers, please specify code numbers successively starting with the first wafer after detent mechanism.

SC17 · Codes

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SAFETY AND WARNING NOTES

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DISCLAIMER

The information contained in this document is for general guidance only. The user is responsible for determining the suitability of the technical information referred herein for his application. On delivery of the component, EBE is only obliged to implement those properties set out and agreed upon in this document. Further properties are not included. No guarantee is given. The component has been designed for installation in our customer's products. Manufacturer of the resulting product and consequent liability according to the Product Liability Act lies with the customer. Warranty is limited to below mentioned extent.

The component is not intended for installation in end products for medical, life-saving, or safety-related applications. The use of the component is also not permitted and expressly prohibited in vehicles of any kind (including trailers and watercraft), as a component in aerospace products (including radio transmitter for aerospace purposes), or in offshore structures.

User assumes all responsibility and liability to determine whether the component is subject to any applicable international, federal, state, or local laws and regulations related to user's handling and use of the component and, if applicable, user assumes all responsibility and liability for compliance in all respects with such laws and regulations.

Disclaimer for improper use

The manufacturer accepts no liability for damage resulting from improper, inappropriate, or non-compliant use of the component. Any liability for direct or indirect damage, consequential damage or loss resulting from improper use is excluded. The Customer (user) is obliged to use the component exclusively in accordance with the instructions and information given in this document.

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REVISION

REVISION	DATE	DESCRIPTION
1.0	09.07.2026	Initial Data Sheet Short Version

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