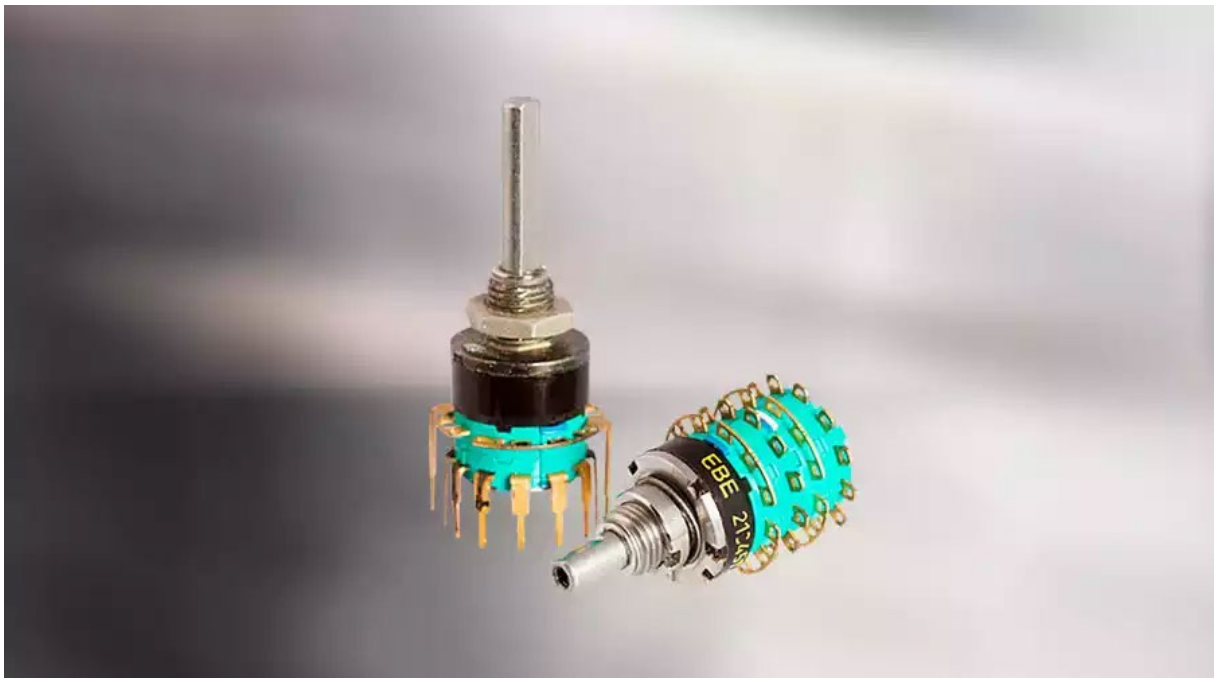
MX/EMX/MXD – HMI-Switches



DESCRIPTION

Miniature rotary switch with 1 to 6 wafers.

- Multi-wafer version for conventional wiring.
- Single-wafer switch EMXD for direct PCB soldering to PC boards.
- 1 to 4 circuits per wafer.
  Detent angles 30°or 60°.
- Adjustable stops.
- Special version watertight against front panel available.
- Version MX/EMX: Without or with fixed stops.
  Detent angles 30°, 36°or 60°.
- Special designs on request.

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TECHNICAL DATA

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

NUMBER OF WAFERS MAX.	6 wafers
SWITCHING COMBINATIONS PER WAFER:	
DESIGN B, DETENT ANGLE 60°	1x6 to 1x2; 2x3 to 2x2; 3x2; 4x2
DESIGN D, DETENT ANGLE 36°	1x6 to 1x2; 2x3 to 2x2; 3x2; 4x2
DESIGN E, DETENT ANGLE 30°	1x12 to 1x2; 2x6 to 2x2; 3x4 to 3x2; 4x3 to 4x2
CONTACTS	Soldering lugs, single-wafer switch, also pins
MOUNTING	Central mounting
SWITCHING MODE	Shorting or non-shorting
STOPS (MXD)	Variable
STOPS (MX/EMX)	Fixed or without stop
OPERATING TORQUE ACC. TO DESIGN	Typically ≥3,5 Ncm
FASTENING TORQUE MAX.	Typically 120 Ncm
DUST PROTECTION	Sealed wafer
CONTACT MATERIAL	Ag or AuNi
INSULATION MATERIAL WATER	Diallylphthalate, DAP; Code DI
INSULATION MATERIAL ROTOR	Polycarbonate, PC
SOLDERING TIME AND TEMP.	5s at 260°C

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

	Ag-version	**AuNi-version**
SWITCHING POWER MAX.	10VA/W	6VA/W
SWITCHING CURRENT MAX.	0,5 A	0,25 A
CONTACT RESISTANCE INITIAL VALUE	≤ 12 mΩ	≤ 10 mΩ

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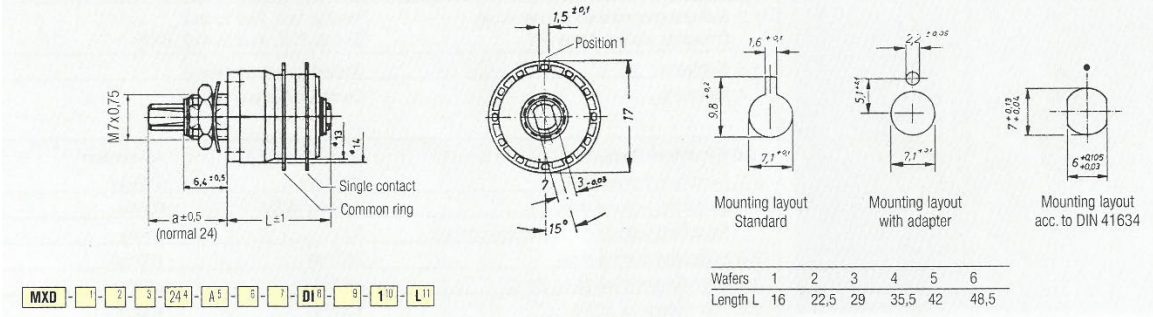
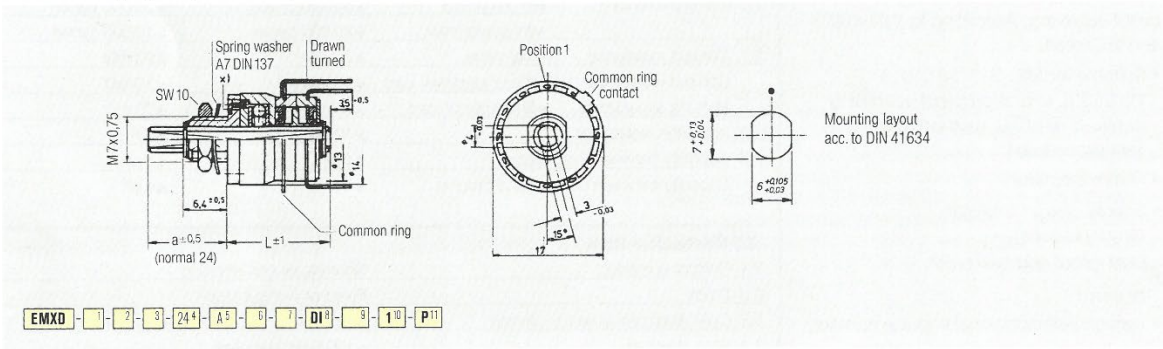
DIMENSIONS

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.

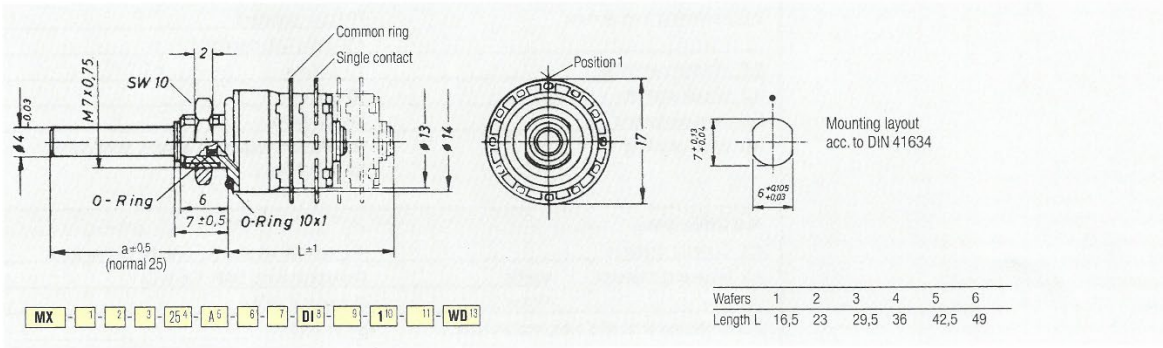
Dimensional Drawings · Dimensions in mm



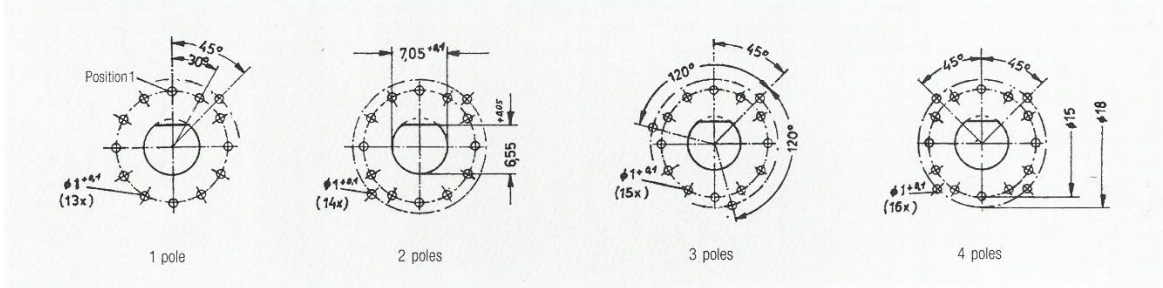
MXD · Soldering lugs with variable stop



EMXD · PC-board version with variable stop



MX · Watertight version



Hole location diagrams – view from the frontside

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SAFETY AND WARNING NOTES

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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	16.07.2026	Initial Data Sheet Short Version

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