LUCAS-EBA ENCLOSED ROTARY SWITCHES

SWITCH TYPE	MANUFACTURER'S PART NUMBER	RS STOCK NO.
Type MY non-shorting		
1 pole 12 pos	MY1/1 x 12 UT = 12	321-313
2 pole 6 pos	MY1/2 x 6 UT = 12	321-329
4 pole 6 pos	MY2/4 x 6 UT = 12	321-335
Type MY shorting		
1 pole 12 pos	MY1/1 x 12 KT = 12	321-341
2 pole 6 pos	MY1/2 x 6 KT = 12	321-357
Type GX non-shorting		
1 pole 12 pos	GX1/1 x 12 UT = 12	321-363
2 pole 6 pos	GX1/2 x 6 UT = 12	321-379
4 pole 6 pos	GX2/4 x 6 UT = 12	321-385

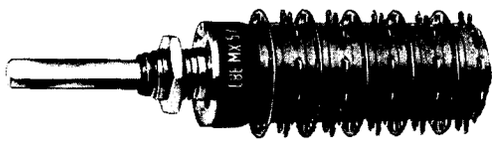
Rotary Wafer Switches

EBE

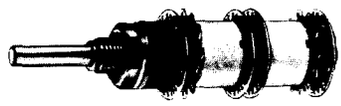
Ordering Code (example)

MX 2 / 4 x 5 u, T = 12, with stop
① ② ③ ④⑤ ⑥ ⑦

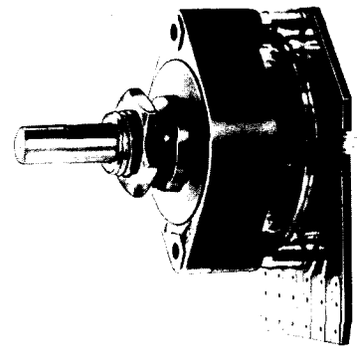
Ag DAP/PPO –
⑧ ⑨ ⑩



MY: 12 mm diameter MX: 17 mm diameter GX: 25,5 mm diameter



MY with spacers *and dummy wafer*

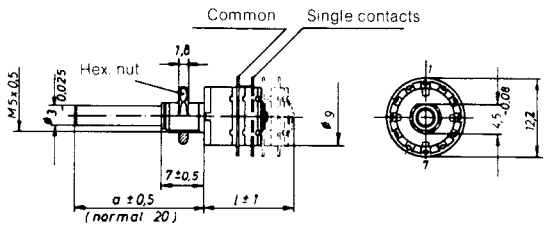


① **Switch type**	**MY**			**MX**			**GX**		**CBS**					
Dimension [mm] **Drawing page**	12 ø 12			17 ø 12			25,5 ø 12		30,5 x 49 13					
② **Wafer (s) per switch** **max.**	4			6			10		3					
③ **Pole (s) per switch** **max.**	6			12			20		3					
④ **No of positions (limited by stops)** **max. per wafer**	1 x 10 2 x 5	1 x 12 2 x 6 3 x 4	1 x 6 2 x 3 3 x 2	1 x 10 2 x 5	1 x 12 2 x 6 3 x 4 4 x 3	1 x 6 2 x 3 3 x 2 4 x 2	1 x 12 2 x 6 3 x 4 4 x 3 6 x 2	1 x 6 2 x 3 3 x 2 4 x 2	1 x 10	1 x 12	1 x 16	1 x 20 on request only	1 x 23 (1 x 24 only without or with fixed stops)	1 x 31 (1 x 32 only without stops)
⑤ **Contacts** **u = nonshorting (others** **k = shorting see below)**	u k	u k	over dummy contacts	u k	u k	over dummy contacts	u k	over dummy contacts	b, bk	b, bk g, gk	b, bk g, gk	b, bk	b, bk g, gk	b, bk g, gk
⑥ **Indexing**	*T* = 10 (36°)	*T* = 12 (30°)	*T* = 6 (60°)	*T* = 10 (36°)	*T* = 12 (30°)	*T* = 6 (60°)	*T* = 12 (30°)	*T* = 6 (60°)	*T* = 10 (36°)	*T* = 12 (30°)	*T* = 16 (22,5°)	*T* = 20 (18°)	*T* = 24 (15°)	*T* = 32 (11,25°)
⑦ **Stops (with or without)**	Fixed (factory fitted to order)			Fixed (factory fitted to order)			Fixed (factory fitted to order)		Adjustable					
⑧ ***Contact material***	Ag + gold flash Au (5 µm) + gold flash only T = 12/6: Au (1 µm) + gold flash			Ag + gold flash Au + gold flash			Ag + gold flash Au + gold flash *Ag/Pd 70/30* + gold flash		Au					
⑨ **Insulating material** **Stator** **Rotor**	DAP Noryl			DAP PPO			DAP PPO		Epoxy paper					
⑩ **Please specify special features**									A: Solder and plug connection B: Pins for PCB C: Pins for Mini Wire Wrap *D: For ribbon cable (on request)*					
Resistive load max. [VA]	Ag: 5 Au: 3			Ag: 10 Au: 6			Ag: 15 Au: 10		3					
Current switching max. carrying [A]	Ag: 0,2 Au: 0,1 1,5			Ag: 0,5 Au: 0,25 2			Ag: 0,5 Au: 0,25 2		0,1 1					
Voltage switching max. [V]	Ag: 115 ≅ Ag: 60 ≅			Ag: 115 ≅ Ag: 60 ≅			Ag: 125 ≅ Ag: 60 ≅		60 ≅					
Initial contact resistance [m Ω]	Ag: ≦ 20 Ag: ≦ 25			Ag: ≦ 20 Ag: ≦ 25			Ag: ≦ 20 Ag: ≦ 25		≦ 110					
Proof voltage contacts frame [V_{eff}]	700 800			900 1000			1000 1300		500 700					
Insulation resistance [Ω]	≧ 1 x 10^{11}			≧ 1 x 10^{11}			≧ 1 x 10^{11}		≧ 5 x 10^{10}					
Life [Cycles]	≧ 25000			≧ 25000			≧ 25000		≧ 25000					
Temperature range [°C]	−40°...+85°			−40°...+85°			−40°...+85°		−40°...+85°					
Stop strength max. [Nm]	0,5			0,7			1,25		1,5					
Operating torque with 1 wafer [Nm]	0,03			0,035			0,06		0,09					
Special features														
⑤ **Alternative contact arrangements** **b = binary code** **bk = binary compl. code** **g = gray code** **gk = gray code compl.** ***hd = hexadecimal***	Mounting bush water sealed Binary and binary complement coded on two wafers, Spacers *between wafers* (T = 12) Special cut-out of contactrings			Same as MY, plus Dual concentric shaft MXR: First or last position *biased to next* MXS: Push to turn feature S40MX: Key operated switch			Same as MY plus Dual concentric shaft		Mounting bush water sealed Additional attached std. BS wafers (page 5) With diodes for decoupling Dual concentric shaft Pins for P.C.B. or Mini Wire Wrap					
	Type MZ is a combination of a MX mechanism and MY wafers, only T = 12 (30°)													

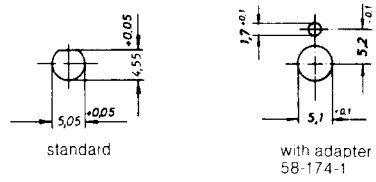
Dimensions

EBE

MY



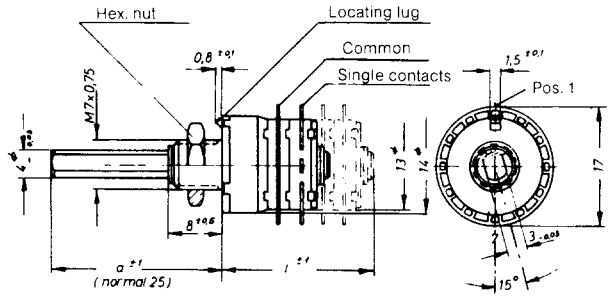
Mounting hole in panel



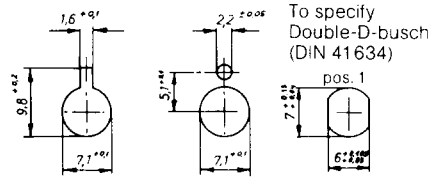
No. of wafers	1	2	3	4
l =	10	14	18	22

Standard shaft length a = 20 ±0,5 mm
Mounting bush water sealed:
Bush length 6,5 mm; dimension l = + 0,5 mm.

MX



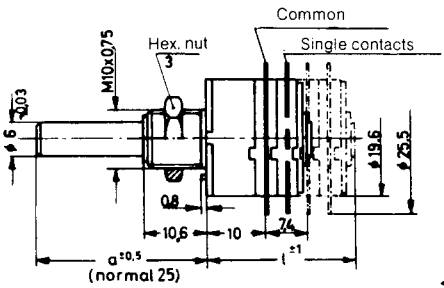
Mounting hole in panel

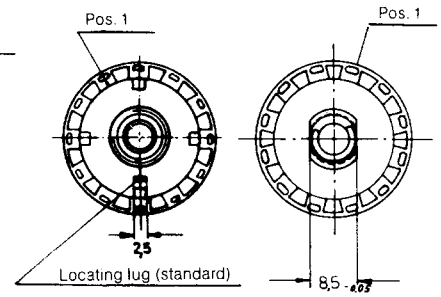


No. of wafers	1	2	3	4	5	6
l =	16	22,5	29	35,5	42	48,5

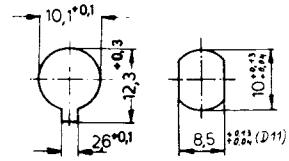
Standard shaft length a = 25 ±0,5 mm
On request shaft 4 mm ø round.
Mounting bush water sealed: Bush length 7 mm;
shaft 4 mm ø round; mounting hole DIN 41634.

GX





Mounting hole

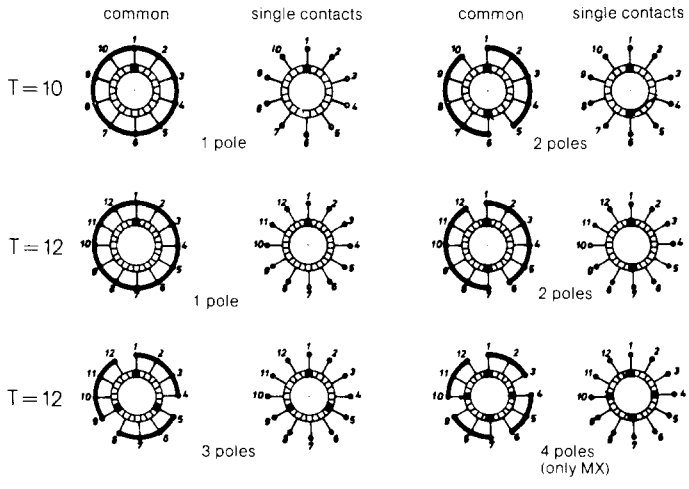


No. of wafers	1	2	3	each add. wafer
l =	19	26	33,5	7,4

Standard shaft length a = 25 ±0,5 mm
Drawing for sealed bush on request.

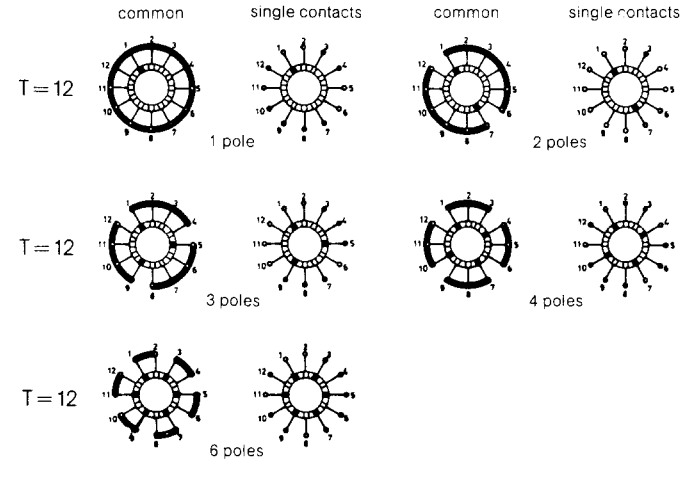
Standard contact arrangements

MY and MX



T = 6 *First contacts same, but used only every second*

GX



T = 6 First contacts same, but used only every second