

ROTARY SWITCHES

TYPE DB

Coded Output Switch

4, 6, 8 10, 12 or 16 positions

FEATURES

- Compact 25mm sq. panel area
- Balanced positive indexing
- Spindle and panel sealing option
- Alternative bush and spindle sizes
- Stainless steel spindles
- Gold contacts for low level switching
- Biased at either both or end positions
- End stop to limit rotation
- Banking of sections
- 100% electrically tested
- Wide operating temperature range



TECHNICAL SPECIFICATION

Electrical Specifications

Contact Rating:- Switching	5VA dc. 10VA ac. (1A max) resistive
Continuous	2A
Proof Voltage (for 1 min.)	500 d.c. volts peak, adjacent terminals 1000 volts peak all terminals to frame
Insulation Resistance	1000M Ω minimum at 100 volts dc.
Contact resistance	60m Ω maximum initial at the terminations measured at 100mV, 100mA. 20m Ω maximum increase after 20,000 cycles of operation at 85°
Capacitance	3pf adjacent terminals
Switching per Wafer	Any 5 bit code from 1 input see standard codes available in tables

Mechanical Specifications

Endurance (Electrical)	20,000 cycles (1 cycle is full rotation in both directions) minimum, at upper temperature category and electrical load.
Endurance (Mechanical)	50,000 cycles
No. of Positions (With or Without End Stops).	4 maximum at 90° 6 maximum at 60° 8 maximum at 45° 16 maximum at 22½° 12 maximum at 30° 10 maximum at 36°
Operating Torque	Light - .028/.112Nm Medium - .084/.168Nm Heavy - .14/.336Nm
End Stop Strength	1.13Nm
Temperature Range	-40°C/+85°C pillar terminals
Terminal Strength	Tensile test load 10N
Sealing	Spindle & panel seal option max. leakage 1ml/hour.
Switch Mounting	Panel mounting via M7 or M10 threaded bush.
Operating Spindle	4.0DIA or 6.0DIA.
Dual Concentric Operation	Consult WASP for available options.

Materials and Finishes

Switch Wafer	Copper clad epoxy glass laminate etched & finish electroplated nickel 5 μ m & hard (150 VFN) gold 2.5 μ m min
Terminals	Hard brass nickel & tin-lead plated for subsequent solderability.
Wiping Contact	Be Cn electroplated nickel 5 μ m & finished in hard gold 2.5 μ m
Mouldings	Glass filled nylon 66
Mechanism Rollers	Stainless steel
Mechanism Thrust Plates	
Mechanism Springs	
Front Spindle	Stainless steel 18/8
Sealing Rings	Panel seal in nitrile spindle seals (2) in silicone
Mounting Bush	Brass electroplated

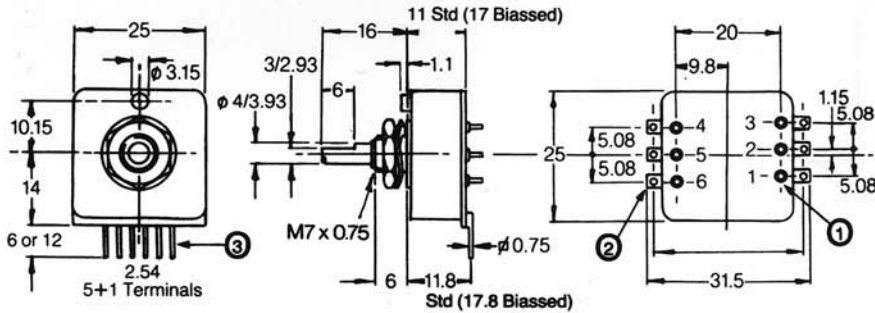
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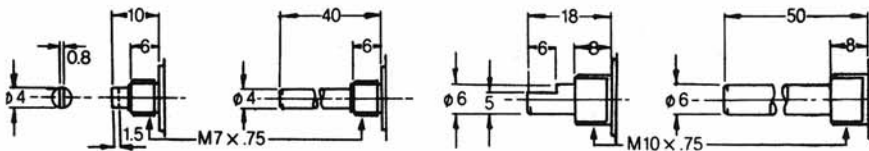
TYPE DB

Dimensions in mm



- ① PILLAR TERMINALS
- ② SOLDER LUGS
- ③ PC TERMINALS

Alternative Spindles



22° INDEX GRAY

POS	TERMINAL IDENTS					
	3	2	5	1	4	6
0						
1	●					
2	●	●				
3	●	●	●			
4	●	●	●	●		
5	●	●	●	●	●	
6	●	●	●	●	●	●
7						
8						
9	●	●	●	●	●	
10	●	●	●	●	●	●
11	●	●	●	●	●	●
12	●	●	●	●	●	●
13	●	●	●	●	●	●
14	●	●	●	●	●	●
15						

22° INDEX 0-15

POS	TERMINAL IDENTS					
	3	2	5	1	4	6
0						
1	●					
2	●	●				
3	●	●	●			
4	●	●	●	●		
5	●	●	●	●	●	
6	●	●	●	●	●	●
7	●	●	●	●	●	●
8						
9	●	●	●	●	●	
10	●	●	●	●	●	●
11	●	●	●	●	●	●
12	●	●	●	●	●	●
13	●	●	●	●	●	●
14	●	●	●	●	●	●
15	●	●	●	●	●	●

22° INDEX 0-15 COMPLIMENT

POS	TERMINAL IDENTS					
	3	2	5	1	4	6
0						
1	●	●	●	●	●	
2	●	●	●	●	●	
3	●	●	●	●	●	
4	●	●	●	●	●	
5	●	●	●	●	●	
6	●	●	●	●	●	
7	●	●	●	●	●	
8	●	●	●	●	●	
9	●	●	●	●	●	
10	●	●	●	●	●	
11	●	●	●	●	●	
12	●	●	●	●	●	
13	●	●	●	●	●	
14	●	●	●	●	●	
15	●	●	●	●	●	

30° INDEX 0-11 COMPLIMENT

POS	TERMINAL IDENTS					
	3	2	5	1	4	6
0						
1	●	●	●	●	●	
2	●	●	●	●	●	
3	●	●	●	●	●	
4	●	●	●	●	●	
5	●	●	●	●	●	
6	●	●	●	●	●	
7	●	●	●	●	●	
8	●	●	●	●	●	
9	●	●	●	●	●	
10	●	●	●	●	●	
11	●	●	●	●	●	

36° INDEX BCD COMPLIMENT

POS	TERMINAL IDENTS					
	3	2	5	1	4	6
0	●	●	●	●	●	
1	●	●	●	●	●	
2	●	●	●	●	●	
3	●	●	●	●	●	
4	●	●	●	●	●	
5	●	●	●	●	●	
6	●	●	●	●	●	
7	●	●	●	●	●	
8	●	●	●	●	●	
9	●	●	●	●	●	

36° INDEX BCD

POS	TERMINAL IDENTS					
	3	2	5	1	4	6
0						
1	●					
2	●	●				
3	●	●	●			
4	●	●	●	●		
5	●	●	●	●	●	
6	●	●	●	●	●	●
7	●	●	●	●	●	●
8	●	●	●	●	●	●
9	●	●	●	●	●	●

30° INDEX GRAY

POS	TERMINAL IDENTS					
	3	2	5	1	4	6
0						
1	●	●	●	●	●	
2	●	●	●	●	●	
3	●	●	●	●	●	
4	●	●	●	●	●	
5	●	●	●	●	●	
6	●	●	●	●	●	
7	●	●	●	●	●	
8	●	●	●	●	●	
9	●	●	●	●	●	
10	●	●	●	●	●	
11	●	●	●	●	●	

30° INDEX 0-11

POS	TERMINAL IDENTS					
	3	2	5	1	4	6
0						
1	●	●	●	●	●	
2	●	●	●	●	●	
3	●	●	●	●	●	
4	●	●	●	●	●	
5	●	●	●	●	●	
6	●	●	●	●	●	
7	●	●	●	●	●	
8	●	●	●	●	●	
9	●	●	●	●	●	
10	●	●	●	●	●	
11	●	●	●	●	●	



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