

# TEKNIC

## Rocker Switches



014



**TEKNIC** Illuminated and Non-Illuminated Switches are compact and aesthetically elegant, and are suitable for snap mounting in the most common and standard panel cutouts. They are designed for use in a wide variety of applications, in Home Appliances, Office Automation Equipment like Photo-Copiers , Stabilizers , UPS , Printers, Power Supply Units, and other Electrical, Electronic and Instrumentation Equipment.

**APPROVALS**

Our Switches are Certified by TUV SUD Germany , VDE Germany, by Canadian Standards Association (CSA) with C & US mark and Underwriters Laboratories (UL) with UR,C & US mark which is recognised for sales in North American countries, and all over the world.

**GENERAL**

**1. ELECTRICAL CHARACTERISTICS**

Our switches are suitable for switching of resistive, inductive & capacitive loads to the extent of current and voltage ratings of our individual switches, as indicated against them.

**2. AMBIENT TEMPERATURE**

Our switches are suitable for operation in an ambient Temperature upto 85°C, i.e, T85

**3. MATERIALS OF CONSTRUCTION**

Housing : Nylon 66 (Un-filled)  
 Flammability: UL 94, V-2  
 Rocker Button : Nylon 66 / Polycarbonate  
 Flammability: UL 94, V-2  
 Terminals : Copper / Copper Alloy  
 Contacts : Silver / Silver Alloy

**4. REFERENCE STANDARDS**

EN :61058-1, CSA-C22.2 No.55-M1986 & UL - 1054

5. TECHNICAL SPECIFICATION			
INSULATION RESISTANCE (New State) at 500V DC for 1minute	> 100 megohms. Ref : EN 61058-1		
CONTACT RESISTANCE (New State)	< 10 milliohms		
DIELECTRICAL STRENGTH (New State)	Across reinforced insulation Across full disconnection Across micro disconnection	3000V 1500V 500V	Ref : EN 61058-1
CONTACT GAP	≥ 1.5 mm min. Full-Disconnect OR Micro-Disconnect (μ ) as individually specified. Ref : EN 61058-1		
TERMINAL STRENGTH Push and pull forces for terminals in Newtons (N) (Ref : EN 61058-1)	Terminal size	Push - N	Pull - N
	4.8 x 0.8 mm. 6.3 x 0.8 mm.	80 96	98 88
FIXING	Snap - in Mounting		
ELECTRICAL ENDURANCE	10,000 CYCLES min. 6,000 CYCLES min.	Ref.: EN :61058-1 (CSA- C22.2 No.55)	
DEGREE OF PROTECTION	IP 30/40		Ref.: EN :61058-1
PROTECTION AGAINST ELECTRIC SHOCK	CLASS II APPLIANCE Ref.: EN :61058-1		
HEAT & FIRE RESISTANCE	LEVEL 3 Glow wire test at 850° C Ref.: EN :61058-1		
DEGREE OF POLLUTION	2 (NORMAL)		Ref.:EN :61058-1
PROOF OF TRACKING INDEX	PTI 250V (material group IIIa) Ref.: EN :61058-1		
TEMPERATURE RISE AT THE TERMINALS (ACCORDING TO ELECTRICAL LIFE ENDURANCE)	max. 30° c		(CSA- C22.2 No.55) (UL- 1054 )
	max. 55° c		(EN :61058-1)
RoHS COMPLIANT	YES		

**6. APPEARANCE**

**7. OPERATING FUNCTIONS**

( ) INDICATES MOMENTARY ACTION

TYPE	CIRCUIT FUNCTION	CODE	FUNCTIONS
N - NON ILLUMINATED	ON OFF	F1	SINGLE THROW
	(ON) OFF	F2	SINGLE THROW-SPRING RETURN ON 'ON' POSITION.
L - ILLUMINATED	ON (OFF)	F3	SINGLE THROW-SPRING RETURN ON 'OFF' POSITION.
	ON ON	F4	DOUBLE THROW.
NL - CENTRAL ILLUMINATION	(ON) ON	F5	DOUBLE THROW- SPRING RETURN IN ONE POSITION.
	ON OFF ON	F6	DOUBLE THROW- CENTER OFF
NT - NON ILLUMINATED TRANSPARENT	(ON) OFF ON	F7	DOUBLE THROW- CENTER OFF WITH SPRING RETURN IN ONE POSITION
	(ON) OFF (ON)	F8	DOUBLE THROW- CENTER OFF WITH SPRING RETURN ON BOTH POSITIONS

**8. TERMINALS \*\***

**9. HOUSING COLOURS**

**10. BUTTON COLOURS**

**12. DUST COVER**

TERMINAL TYPE	CODE
4.8 x 0.8 mm.	A
6.3 x 0.8 mm.	B
SOLDERABLE TYPE	C
PCB TYPE	D
SCREW TYPE	S

HOUSING COLOUR	CODE
BLACK (WITH POLE BARRIER)	BK
BLACK (WITHOUT POLE BARRIER)	BP
WHITE (WITH POLE BARRIER)	WH
WHITE (WITHOUT POLE BARRIER)	WP
GREY (WITH POLE BARRIER)	GY
GREY (WITHOUT POLE BARRIER)	GP

BUTTON COLOUR	CODE
BLACK	BK
WHITE	WH
GREY	GY
GREEN	GR
RED	RD
AMBER	AM

(Optional)  
 Available only for  
 WS00,WS02,WS03,WS06,  
 WS08,WS09,WS10,WS11,  
 WS12,WS13

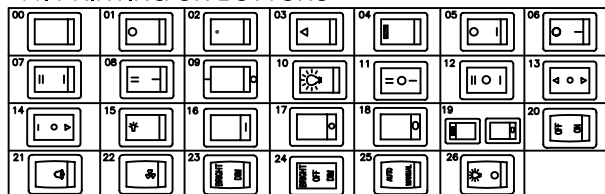
\*\* Note : connections to our switches with terminal designs A & B, should be made only with lugs, and not by soldering.

Soldering conditions for hand soldering : For terminal design C we recommend the following

Soldering device : electronically controlled soldering station  
 Solder : flux - filled solder wire  
 Solder temperature : 350°c ± 10°c  
 Soldering time : 2 to 3 secs.

During Soldering no force shall be applied to the terminals otherwise switch properties could be changed.  
 When using flux, make sure that no flux gets inside the switch via terminals.  
 Longer soldering time and repeated soldering to be avoided to make sure that mechanical properties of the solder point & adjacent area are not disturbed.

**11. PRINTING ON BUTTONS**



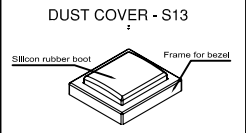
**ORDERING EXAMPLE :**

WS 02 N F1 A WH BK 00

BASIC TYPE  
 APPEARANCE  
 CIRCUIT FUNCTION  
 TERMINAL TYPE  
 ROCKER BUTTON PRINTING  
 ROCKER BUTTON COLOUR  
 HOUSING COLOUR

ROCKER SWITCH TYPE WS 02, NON ILLUMINATED, ON - OFF, TERMINAL 4.8, WHITE HOUSING (WITH POLE BARRIER), BLACK ROCKER BUTTON, WITH NIL PRINTING ON ROCKER BUTTON.

NOTE : 1) FOR SWITCH 2WS13 REPEAT THE ORDERING CODES FOR BOTH RIGHT & LEFT SIDE  
 EXAMPLE : 2WS13 L F1 B BK AM 00 / 2WS13 N F1 B BK BK 00  
 2) FOR DUST COVER CODE S13 TO BE ADDED AFTER CODE FOR PRINTING.  
 EXAMPLE : WS02 N F1 A WH BK 00 S13





**WS 00** UL/CSA RATING : 6A, 125 / 250V ~, 6A 24V DC  
IEC RATING : 6(2)A, 250V ~  
CAPACITIVE CURRENT RATING : 6(4)A, 250V AC (Inrush 45A to EN 61058-1 applies to F1 & F4 functions only)

**WS 10** IEC RATING : 10(4)A, 250V ~  
CAPACITIVE CURRENT RATING : 10(70)A, 250V AC (Inrush 70A to EN 61058-1 applies to F1 & F4 functions only)

**POLES : SINGLE**



**WS 00R** UL/CSA RATING : 6A, 125 / 250V ~, 6A 24V DC  
IEC RATING : 6(2)A, 250V ~  
CAPACITIVE CURRENT RATING : 6(4)A, 250V AC (Inrush 45A to EN 61058-1 applies to F1 & F4 functions only)

**WS 10R** IEC RATING : 10(4)A, 250V ~  
CAPACITIVE CURRENT RATING : 10(70)A, 250V AC (Inrush 70A to EN 61058-1 applies to F1 & F4 functions only)

**POLES : SINGLE**



**WS 09** CSA RATING : 6A, 125/250V ~  
(μ Gap)  
IEC RATING : 6(2)A, 250V ~

**POLES : SINGLE**



**WS 03/** UL/CSA RATING : 6A, 125/250V ~, 6A 24V DC  
VDE RATING : 6(3)A, 250V ~

**WS 13/** UL/CSA RATING : 16A, 125/250V ~ 16A 24V DC  
VDE RATING : 6(4)A, 250V ~

CAPACITIVE LOAD RATING : 16(150)A 250V~ (Inrush 150A to EN 61058-1 applies to F1 & F4 functions only) (IN-HOUSE TESTING)

**POLES : SINGLE**

**SOLDERABLE TYPE**

X	Y	Z
0.75-1.25	12.9	19.2
1.25-2	12.9	19.4
2-3	12.9	19.8

TYPE : NON-ILLUMINATED ONLY.  
FUNCTIONS : F1, F2, F3, F4 (with approval)  
F5 (without approval)  
TERMINALS : A, C  
APPROVALS : WS00 : WS10 :

**SOLDERABLE TYPE PCB TYPE**

X	Y	Z
0.75-1.25	12.9	19.2
1.25-2	12.9	19.4
2-3	12.9	19.8

FUNCTIONS : F1, F2, F3, F4  
TERMINALS : A, C, D  
APPROVALS : WS00R : WS10R :

**SOLDERABLE TYPE**

X	Y	Z
0.75-1.25	12.9	19.2
1.25-2	12.9	19.4
2-3	12.9	19.8

TYPE : NON-ILLUMINATED ONLY.  
FUNCTIONS : F6, F7, F8  
TERMINALS : A, C  
APPROVALS : -F6 only]

**SOLDERABLE TYPE**

X	Y	Z
0.75-1.25	11	30
1.25-2	11	30.2
2-3	11	30.2

FUNCTIONS : F1, F2, F3, F4  
TERMINALS : B, C  
APPROVALS :



**WS 14** RATING : 10(4)A, 250V ~

**POLES : SINGLE**



**WS 39** UL/CSA RATING : 6A, 125/250V ~ 6A 24V DC  
VDE RATING : 6(3)A, 250V ~

**WS 49** UL/CSA RATING : 16A, 125/250V ~ 16A 24V DC  
VDE RATING : 16(4)A, 250V ~  
CAPACITIVE LOAD RATING : 16(150)A 250V~ (Inrush 150A to EN 61058-1 applies to F1 & F4 functions only)

**POLES : SINGLE**



**WS 17** RATING : 6(2)A, 250V ~  
(μ Gap)

**POLES : SINGLE**



**WS 27** UL/CSA RATING : 16A, 125/250V ~ 16A, 24V DC  
(μ Gap)

**POLES : SINGLE**

**SOLDERABLE TYPE**

X	Y	Z
0.75-1.25	12.9	19.2
1.25-2	12.9	19.4
2-3	12.9	19.8

TYPE : NON-ILLUMINATED ONLY.  
FUNCTIONS : F1  
TERMINALS : M3 Screw Terminal  
APPROVALS :

**SOLDERABLE TYPE**

X	Y	Z
0.75-1.25	11	30
1.25-2.5	11	30.2

FUNCTIONS : F1, F2, F3, F4  
TERMINALS : B, C  
APPROVALS :

**SOLDERABLE TYPE**

X	Y	Z
0.75-1.25	11	30
1.25-2.5	11	30.2

TYPE : NON-ILLUMINATED ONLY.  
FUNCTIONS : F1, F4, F6, F7, F8  
TERMINALS : B  
APPROVALS :

**SOLDERABLE TYPE**

X	Y	Z
0.75-1.25	11	30
1.25-2.5	11	30.2

TYPE : NON-ILLUMINATED ONLY.  
FUNCTIONS : F1, F4, F6, F7, F8  
TERMINALS : B  
APPROVALS :



**WS 02**  
 UL/CSA RATING : 6A, 125/250V ~ 6A 24V DC  
 IEC RATING : 6(2)A, 250V ~  
 CAPACITIVE CURRENT RATING : 6/45A, 250V AC  
 (Inrush 45A to EN 61058-1 applies to F1 & F4 functions only)

POLES : DOUBLE



**WS 08**  
 (μ Gap)  
 CSA RATING : 6A, 125/250V ~  
 IEC RATING : 6(2)A, 250V ~

POLES : DOUBLE



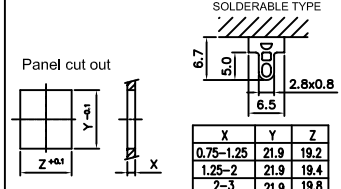
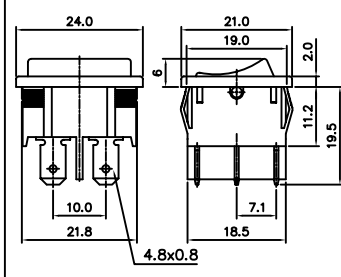
**WS 08L**  
 IEC RATING : 6(2)A, 250V ~  
 CAPACITIVE CURRENT RATING : 6/45A, 250V AC  
 (Inrush 45A to EN 61058-1)

POLES : DOUBLE

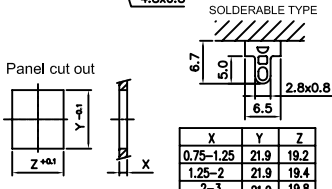
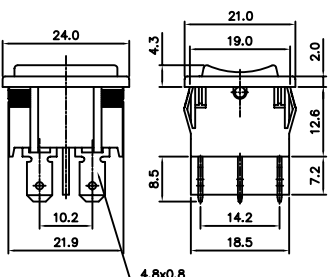


**WS 04**  
 UL RATING : 16A, 125/277V ~ 3/4 HP, 16A 24V DC  
 CSA RATING : 16A, 125/250V ~  
 VDE RATING : 16(4)A, 250V ~  
 RATING :  
 CAPACITIVE CURRENT RATING : 16/150A(Inrush Current) 250V ~  
 (Inrush 150A to EN 61058-1) (IN-HOUSE TESTING)

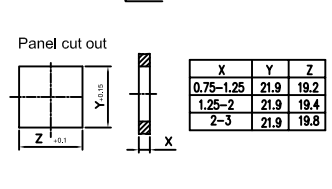
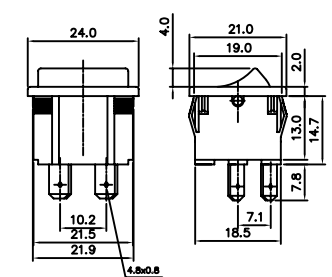
POLES : DOUBLE



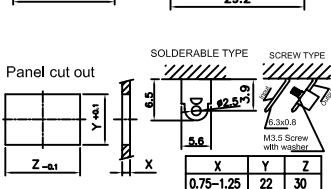
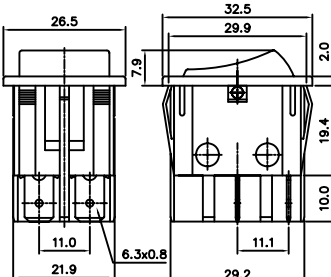
TYPE : NON-ILLUMINATED ONLY.  
 FUNCTIONS : F1,F2,F3,F4(with approval)  
 F5 (without approval)  
 TERMINALS : A, C  
 APPROVALS :



TYPE : NON-ILLUMINATED ONLY.  
 FUNCTIONS : F6,F7,F8  
 TERMINALS : A, C  
 APPROVALS :



TYPE : ILLUMINATED ONLY.  
 FUNCTIONS : F1  
 TERMINALS : B  
 APPROVALS :



TYPE : NON-ILLUMINATED ONLY.  
 FUNCTIONS : F1,F4  
 TERMINALS : B, C, S  
 APPROVALS :



**WS 06**  
 UL RATING : 16A, 125/277V ~ 3/4 HP, 16A 24V DC  
 CSA RATING : 16A, 125/250V ~  
 VDE RATING : 16(4)A, 250V ~  
 RATING :  
 CAPACITIVE CURRENT RATING : 16/150A(Inrush Current) 250V ~  
 (Inrush 150A to EN 61058-1) (IN-HOUSE TESTING)

POLES : DOUBLE



**WS 01**  
 CSA RATING : 4A, 125/250V ~  
 IEC RATING : 6(2)A, 250V ~  
 CAPACITIVE CURRENT RATING : 6/45A, 250V AC  
 (Inrush 45A to EN 61058-1)

POLES : DOUBLE



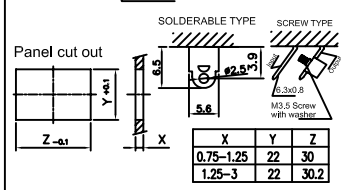
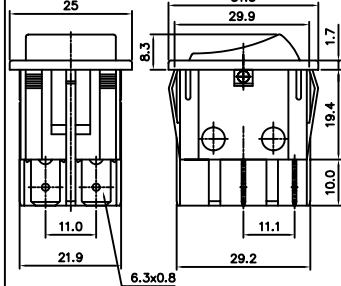
**WS 11**  
 IEC RATING : 8(2)A, 250V ~  
 CAPACITIVE CURRENT RATING : 8 / 70A, 250V AC  
 (Inrush 70A to EN 61058-1)

POLES : DOUBLE

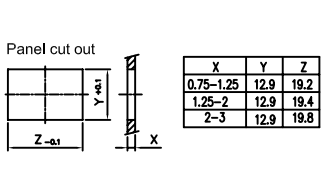
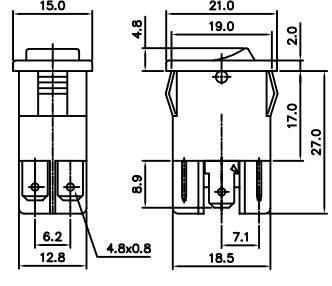


**WS 12**  
 IEC RATING : 10(4)A, 250V ~  
 CAPACITIVE CURRENT RATING : 10/70A 250 ~  
 (Inrush 70A to EN 61058-1)

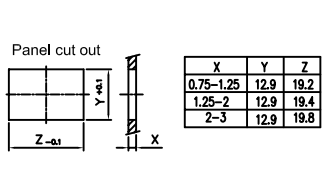
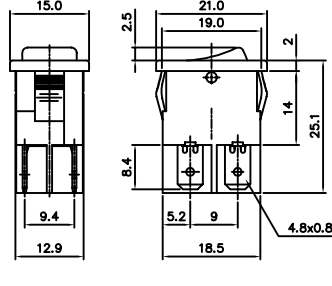
POLES : DOUBLE



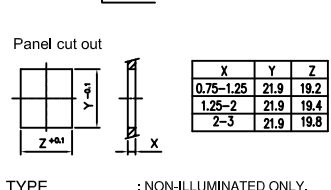
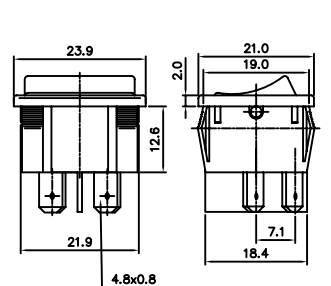
FUNCTIONS : F1,F4  
 TERMINALS : B, C, S  
 APPROVALS :



FUNCTIONS : F1,F4  
 TERMINALS : A  
 APPROVALS :



FUNCTIONS : F1  
 TERMINALS : A  
 APPROVALS :



TYPE : NON-ILLUMINATED ONLY.  
 FUNCTIONS : F1,F4  
 TERMINALS : A  
 APPROVALS :



WS 15  
( $\mu$  Gap) RATING : 6(2)A, 250V AC

WS 25  
( $\mu$  Gap) CSA, UL RATING : 16A, 250V ~, 16A 24V DC  
IEC RATING : 16(4)A, 250V ~

WS 35  
( $\mu$  Gap) CSA, UL RATING : 16A, 250V ~, 16A 24V DC  
IEC RATING : 16(4)A, 250V ~

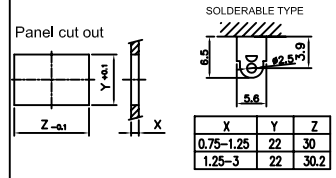
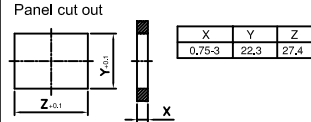
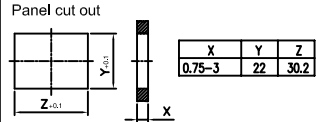
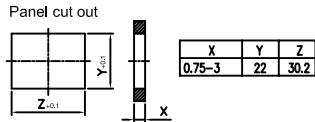
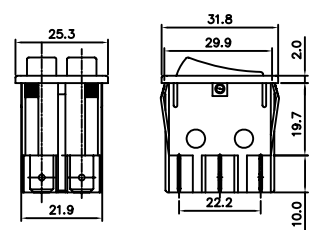
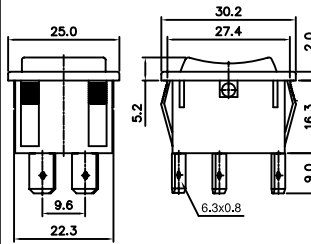
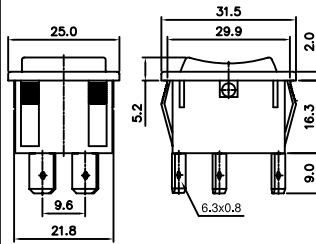
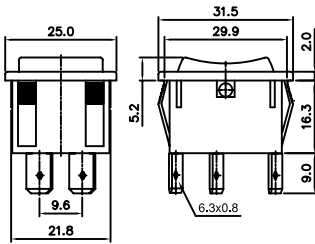
2WS 13  
UL / CSA RATING : 16A, 125/250V ~, 16A 24V DC  
IEC RATING : 16(4)A, 250V ~  
RATING  
CAPACITIVE RATING : 16/150A (Inrush Current) 250V ~  
(In-HOUSE TESTING) (Inrush 150A to EN 61058-1 applies to F1 & F4 functions only)

POLES : DOUBLE

POLES : DOUBLE

POLES : DOUBLE

POLES : SINGLE



FUNCTIONS : F1, F4, F6, F7, F8  
TERMINALS : B

FUNCTIONS : F1, F4, F6, F7, F8  
TERMINALS : B  
APPROVALS:

FUNCTIONS : F1, F4, F6, F7, F8  
TERMINALS : B  
APPROVALS:

FUNCTIONS : F1, F2, F3, F4  
TERMINALS : B, C  
APPROVALS :

WE RESERVE THE RIGHT TO UPGRADE SPECIFICATIONS FOR IMPROVEMENTS WITHOUT ANY PRIOR NOTICE.

For further details, please write to:

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Website: www.teknicelectromeconics.co.in

All dimensions are in mm