



W. Schmid AG

LED-Technology
the visible difference

TS001 Serie



Feature -

- water proof IP67 sealed
- capacitive touch key, panel mount
- wire assembly service
- full color LED illuminated available
- recommend operating voltage 2.0~5.5VDC

Application -

- water purifiers
- kitchen appliances
- vending machines and switches
- used in the polluted environment

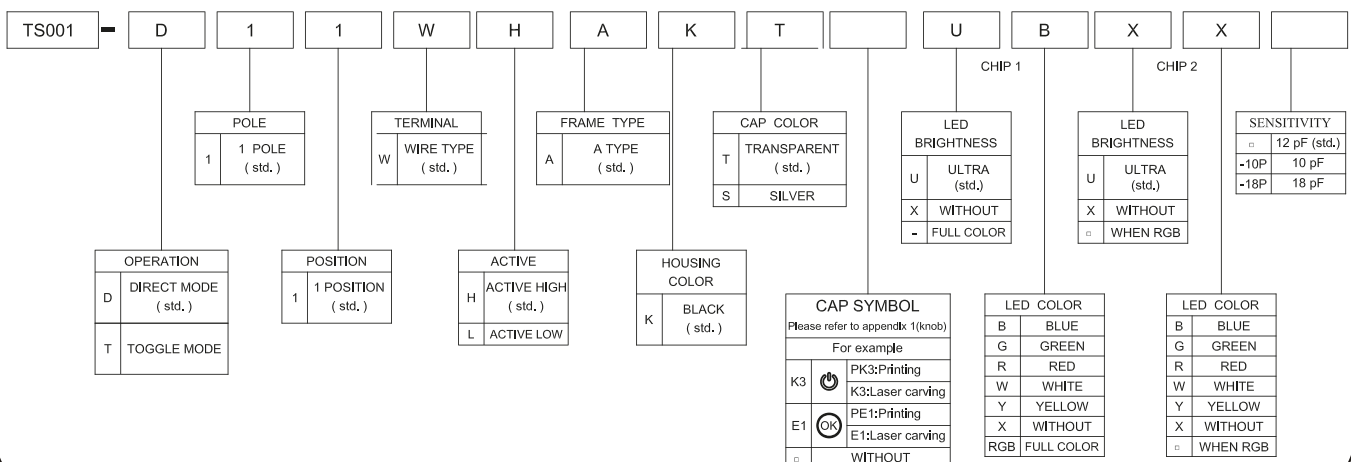
► **SPECIFICATIONS**

Switch Specifications						
POLE - POSITION		One-Channel				
CIRCUIT FEATURE		Capacitive analog signal				
OPERATING TEMPERATURE RANGE		-20°C ~ 70°C				
SEALING		IP67				
ELECTRICAL CHARACTERISTICS						
Symbol	Parameter	Conditions	MIN.	TYP.	MAX.	Units
V _{CC}	Operating voltage		3.0	3.5	5.5	V
F	System oscillator	V _{CC} = 3V		16		KHz
F _{SEN}	Sensor oscillator	V _{CC} = 3V, Output no load		1M		Hz
I _{OP}	Operating current	V _{CC} = 3V, Output no load		1.5	3.0	µA
V _{IL}	Input ports	Input low voltage	0		0,2	V
V _{HI}	Input ports	Input high voltage	0,8		1,0	V
I _{OL}	Output port sink current	V _{CC} = 3V, V _{OL} = 0,6V		8		mA
I _{OH}	Output port source current	V _{CC} = 3V, V _{OH} = 2,4V		-4		mA
T _R	Output response time	V _{CC} = 3V			220	mS
R _{PH}	Input pin pull-high resistor	V _{CC} = 3V		35K		Ω
R _{PL}	Input pin pull-low resistor	V _{CC} = 3V		28K		Ω

LED Specifications		Unit	Value / LED Color		
			Ultra Green	Ultra Yellow	Ultra Red
ATTENTION	LEDs are Electrostatic Sensitive devices				
FORWARD CURRENT	I _f	mA	20	20	20
REVERSE VOLTAGE	V _r	V	5.0	5.0	5.0
REVERSE CURRENT	I _r	µA	10	10	10
FORWARD VOLTAGE@20mA	V _f	V	2.1-2.5	2.0-2.5	2.0-2.5
LUMINOUS INTENSITY@20mA	I _v	mcd	60	120	150

■ Physical and electrical information of LED will be provided upon customer's request on switches .

► **HOW TO ORDER**

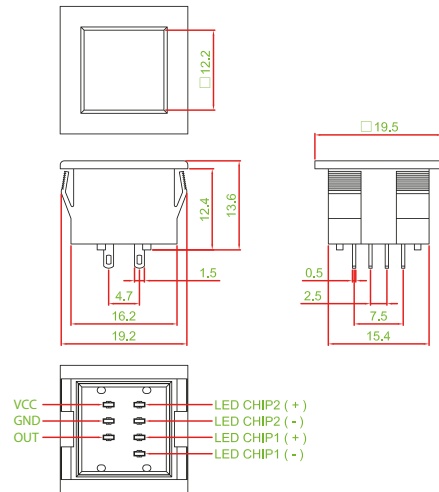




TS001 Serie

► Dimensions & Frame Type

TS001 - D11WHAKT

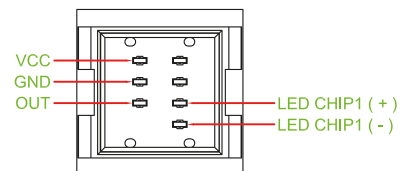


► Panel Cutout

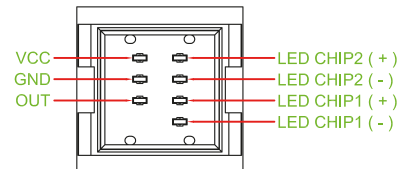
W	PANEL THICK	W
	0.75 ~ 1.25	17.6 ~ 17.8
	1.25 ~ 2.0	17.8 ~ 18.0
	2.0 ~ 3.0	18.0 ~ 18.2

Circuit

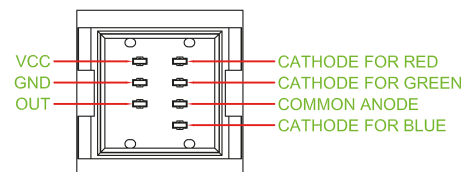
SINGLE COLOR



TWO COLOR

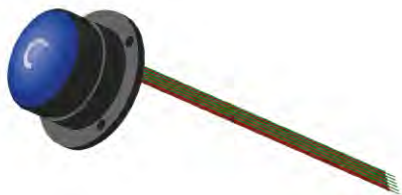


FULL COLOR



► Material

- COVER : PC
- ACTUATOR : POM
- BASE FRAME : PA + GF
- TERMINAL : BRASS SILVER PLATING



CUSTOM-MADE STYLE AVAILABLE



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	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19				
A	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19				
B	A	B	C	D	E	F	G	H	I	J	CH5	CH6	DSK	PIP	C-KEY	CUT	TAKE	REC	ENG	PROD				
C	K	L	M	N	O	P	Q	R	S	T	REPLAY	RET1	RET2	KEY ON	AUTO TAKE	A1	A2	A3	A4	SPK				
D	U	V	W	X	Y	Z	POWER	ON/OFF	ON	OFF	USER A	USER B	USER C	USER D	USER E	USER F	USER G	USER H	USER I					
E	OK	OK	Auto	Enter	Start	STOP	OPEN	CLOSE	Exit	Move	USER J	↺	✕	□	⏪	⏩	⏹	⏸	M-1	⏮				
F	SET	Reset	Light	Alarm	Menu	Next	Back	Delete	Motor	Save	⏮	⏪	⏩	⏭	✓1	✓2	☰	⏮	⏮	⏮				
G	Up	Down	Right	Left	Test	End	Insert	Lock	Print	+/-	⏮	⏪	⏩	⏭	⏮	⏮	IN PORT	SOS	⚡	TC				
H	ESC	BC.	HOME	Health	D-LED 2	OC GENIE	VIDEO INPUT	clr CMOS	Green Power	Save OK	P1	P2	P3	P4	P5	D C	A C	✉	✉	TURBO				
I	B/R +	Undo/Cancel	T/L -	F1	F2	F3	F4	F5	F6	F7	SEEK	TRACK	RNA	AS/RPT	Select	⏮	SET	ON	OFF	UP				
J	F8	F9	F10	F11	F12	F13	F14	IN 1	IN 2	IN 3	TEST	AUTO	STOP	OPEN	MENU	ON AIR	○	D.	M.	↵				
K	IN 4	IN 5	IN 6	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	HDMI	VGA	⏻	⏻	⏻				
L	+	-	✕	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	MON	ITEM	C/S	GAS	PUMP ON/OFF	PURGE	R/H/R	PARL	IOD	
M	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	FILL	LO RANGE	MID RANGE	MID	HI RANGE	GPD	EFF LEVEL	⏻	⏻					
N	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻														
O	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻														
P	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻	⏻														
Q	ME3	ME4	BGND 3D DVE1	BGND 3D DVE2	BUS COLOR	ME BUTTON LINK	*	INSERT	WIPE	⏻														
R	⏻	ALL	⏻	VP	⏻	COPY	⏻	RECORD MODE	⏻	⏻														
S	⏻	♥	MUTE	⏻	⏻	⏻	⏻	⏻	⏻	⏻														
T	⏻	hold	group	m1	m2	m3	m4	m5	t1	t2														
U	s1	s2	chair	undo	redo	touch	store	recall	e1	e2														
V	e3	e4	OC	⏻	⏻	CLEAR	CROSS WIND	AMMO TEMP	BARO PERSS	AIR TEMP														
W	BORE-SIGHT	CANT	LEAD	RANGE	MRS	ZERO	TEST	UD	LR	⏻														
X	ID	Disp	MF	CALL	.	BAND	SETUP	MODE	LINK	FUNC.														
Y	SHIFT	⏻	⏻	⏻	⏻	DEL	⏻	⏻	⏻	⏻														
Z	⏻	⏻	T	RUN	2D	3D	CH1	CH2	CH3	CH4														