

**TS004 SERIES**  
LED TOUCH SENSOR SWITCH



**Feature -**

- panel mount
- moisture and dust proof
- metal style
- full color LED illuminated available

**Application -**

- indoor lighting
- ambient light monitoring
- CCTV security equipments
- detection of ambient light to control some devices

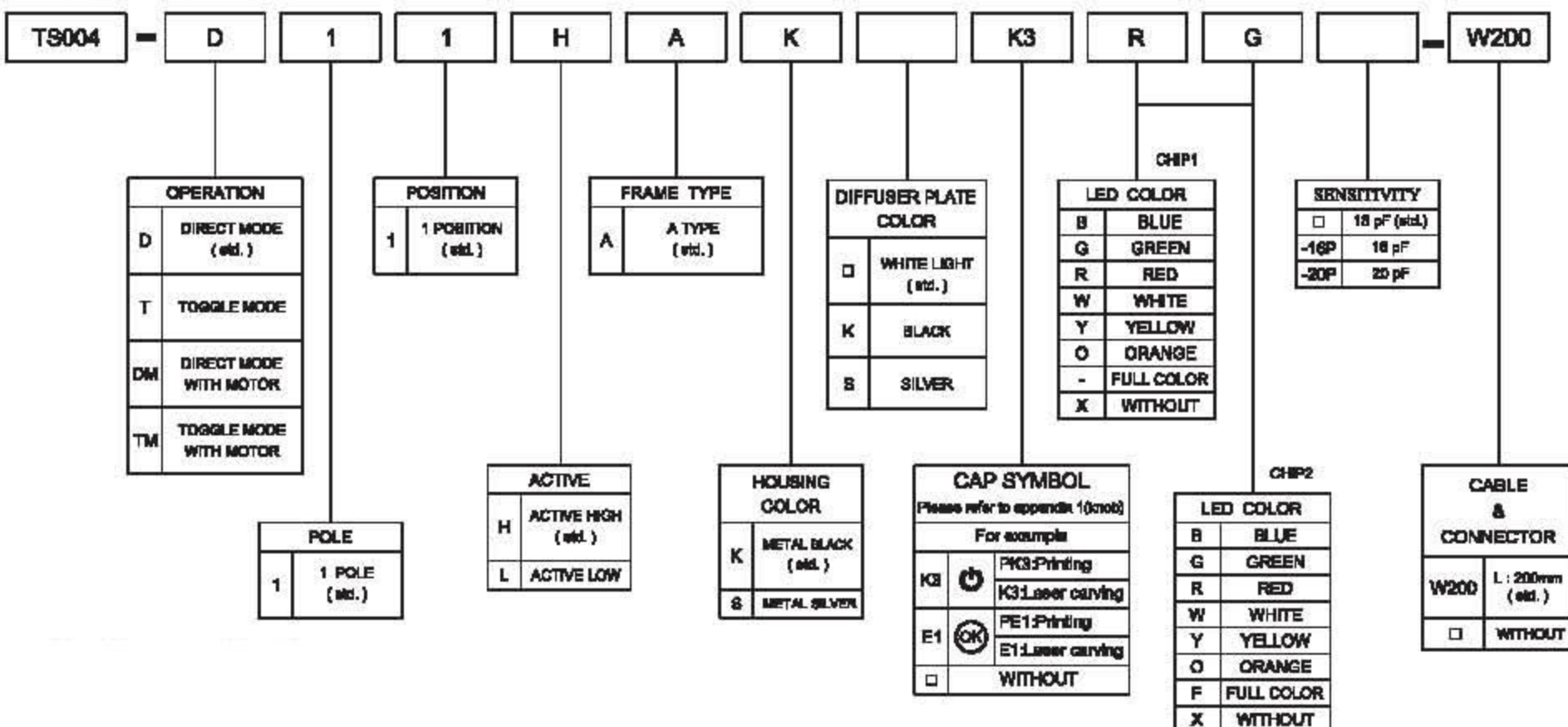
► **SPECIFICATIONS**

SWITCH SPECIFICATIONS						
POLE - POSITION		One-Channel				
CIRCUIT FEATURE		Capacitive analog signal				
OPERATING TEMPERATURE RANGE		-20°C ~ 70°C				
ELECTRICAL CHARACTERISTICS						
Symbol	Parameter	Conditions	MIN.	TYP.	MAX.	Units
V <sub>cc</sub>	Operating voltage		2.0	3.0	5.5	V
F	System oscillator	V <sub>cc</sub> = 3V		16		KHz
F <sub>SEN</sub>	Sensor oscillator	V <sub>cc</sub> =3V, Output no load		1M		Hz
I <sub>OP</sub>	Input ports	V <sub>cc</sub> =3V, Output no load		1.5	3.0	µA
V <sub>IL</sub>	Input ports	Input low voltage	0		0.2	V
I <sub>OH</sub>	Operating current	Input high voltage	0.8		1.0	V
I <sub>OL</sub>	Output port sink current	V <sub>cc</sub> =3V, V <sub>OL</sub> =0.8V		8		mA
I <sub>OH</sub>	Output port source current	V <sub>cc</sub> =3V, V <sub>OH</sub> =2.4V		-4		mA
T <sub>RI</sub>	Output response time	V <sub>cc</sub> =3V			220	ms
R <sub>IN</sub>	Input pin pull-high resistor	V <sub>cc</sub> =3V		35K		Ω
R <sub>IL</sub>	Input pin pull-low resistor	V <sub>cc</sub> =3V		28K		Ω

LED SPECIFICATIONS					
ATTENTION (+) (-) LEDs are Electrostatic Sensitive devices	Unit	Value / LED Color			
		Ultra Green	Ultra Yellow	Ultra Red	
FORWARD CURRENT	I <sub>F</sub>	mA	20	20	20
REVERSE VOLTAGE	V <sub>R</sub>	V	5.0	5.0	5.0
REVERSE CURRENT	I <sub>R</sub>	µA	10	10	10
FORWARD VOLTAGE@20mA	V <sub>F</sub>	V	2.1-2.5	2.0-2.5	2.0-2.5
LUMINOUS INTENSITY@20mA	I <sub>V</sub>	mcd	80	120	150

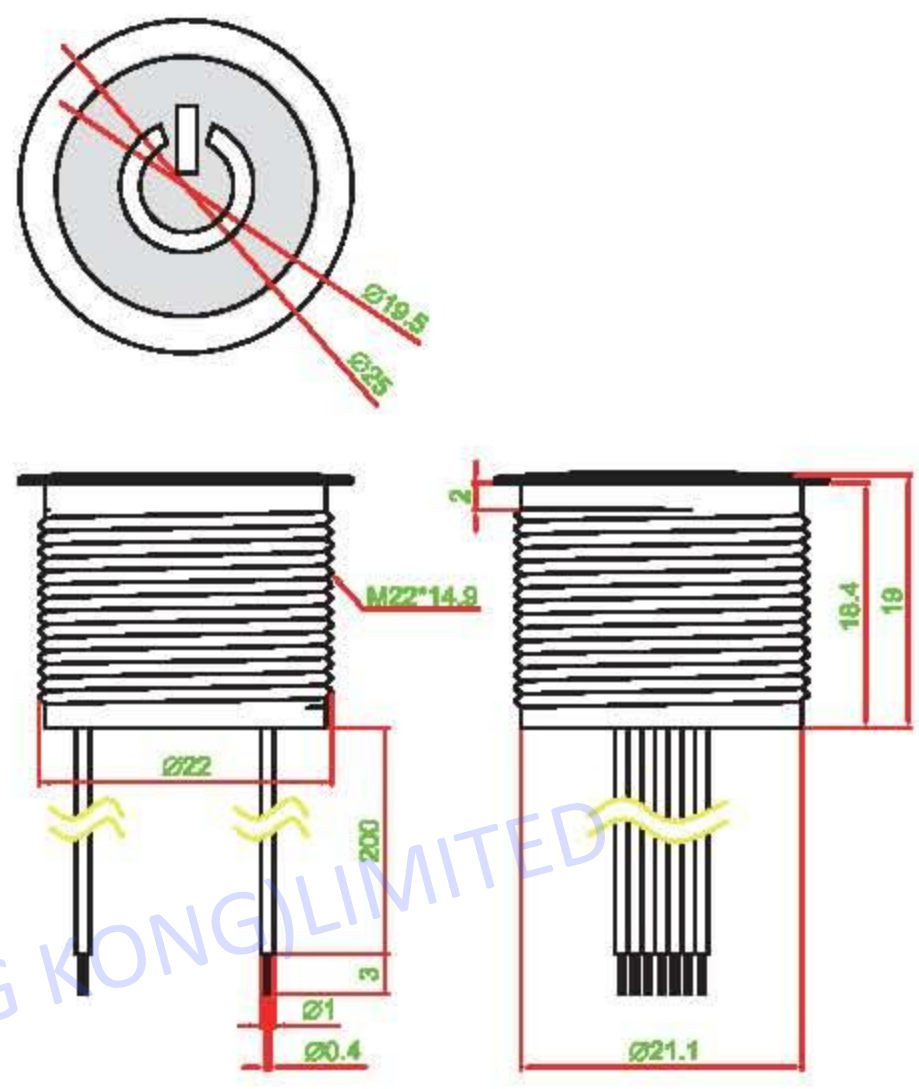
Physical and electrical information of LED will be provided upon customer's request on switches.

► **HOW TO ORDER**



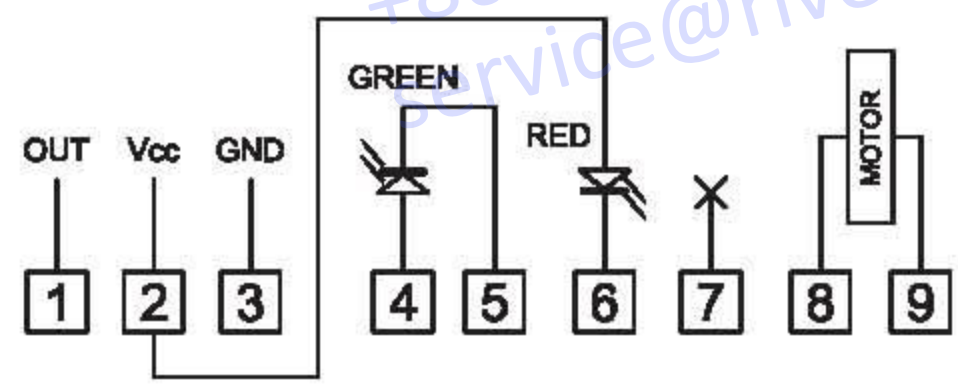
**▶ DIMENSION & FRAME TYPE**

TS004-DM11HAKKK3□□□□-W200

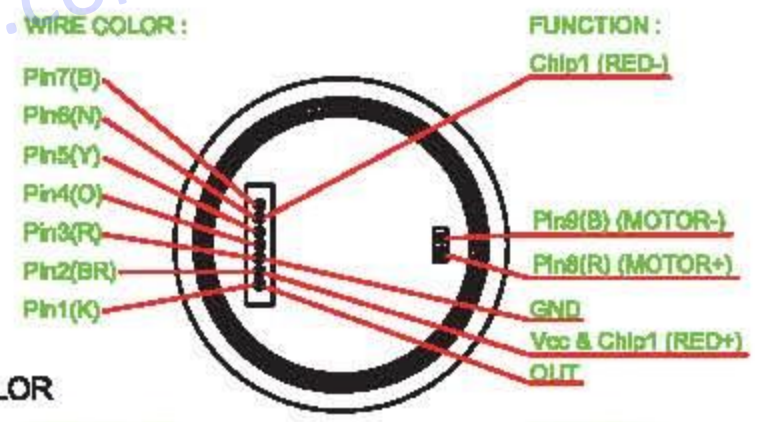


**▶ SCHEMATIC**

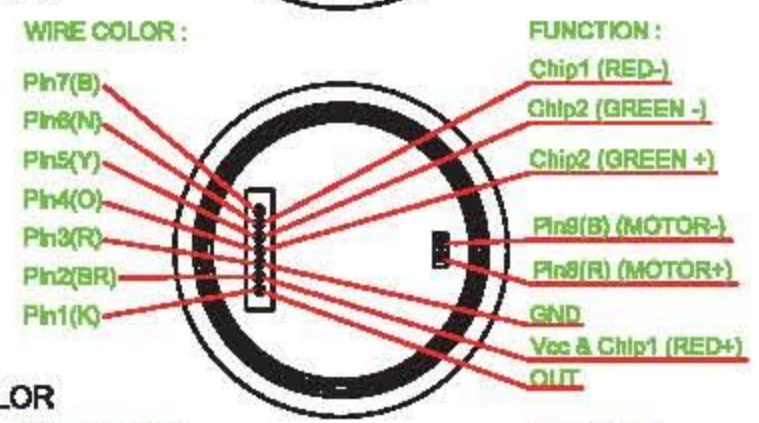
TWO COLOR :



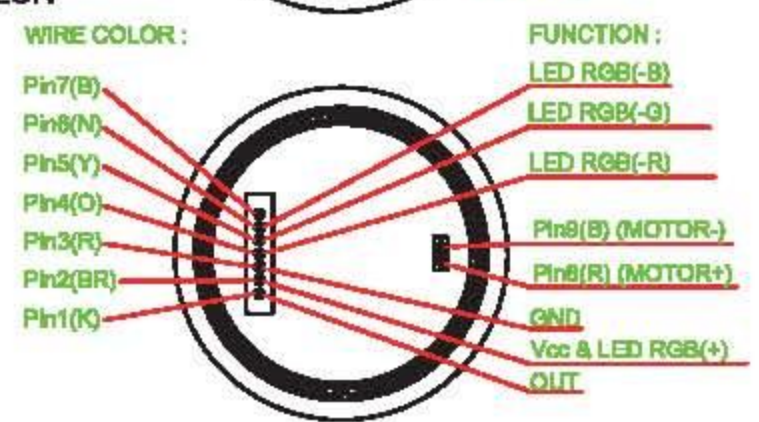
SINGLE COLOR



TWO COLOR



FULL COLOR



**▶ MATERIAL**

- COVER : PC
- ACTUATOR : POM
- BASE FRAME : PA + GF
- TERMINAL : PHOSPHOR BRONZE SILVER PLATING
- SPRING : PHOSPHOR BRONZE SILVER PLATING

