



Feature -

encoder: 18 pulse scroller output, and one key center output
VR: 14 position scroller output, and one key center output
bi-color LED illuminated available

Application -

audio / video equipments
consumer products
computer products
Instrumentation
communication equipments
home appliances

► **SPECIFICATIONS**

SWITCH SPECIFICATIONS							
POLE - POSITION				One-Chanel			
CIRCUIT FEATURE				Capacitive analog signal			
OPERATING TEMPERATURE RANGE				-20°C ~ 70°C			
SEALING				PANEL SEALED TO IP67			
ELECTRICAL CHARACTERISTICS							
Symbol	Parameter	Test Conditions		MIN,	TYP,	MAX,	Units
		V _{DD}	Condtions				
V _{CC}	Input Voltage	—	—	4,5	5,0	5,5	V
V _{DD}	Operating Voltage	—	—	3,0	3,3	3,6	V
I _{DD}	Operating Voltage - No Load	3,3V	3,3V	2	3	5	mA
V _{OH}	Output High Voltage	3,3V	I _{OH} = - 4,0mA	2,1	—	—	V
V _{OL}	Output Low Voltage	3,3V	I _{OH} = 8,0mA	—	—	0,9	V
V _{IL}	Input ports	3,3V	—	—	200	—	Hz

LED SPECIFICATIONS						
 ATTENTION LEDs are Electrostatic Sensitive devices		Unit	Value / LED Color			
			Ultra Green	Ultra Yellow	Ultra Red	
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.

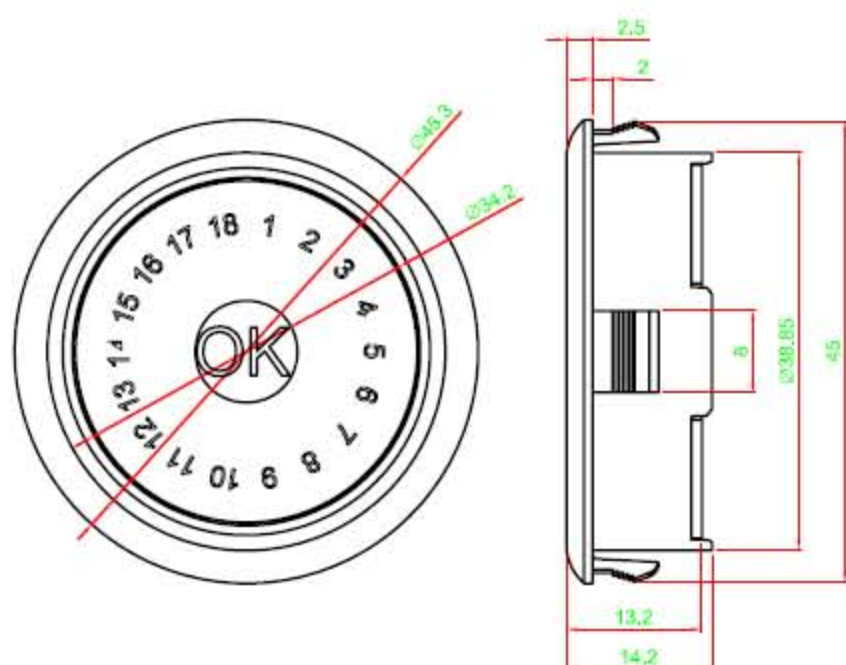
► **HOW TO ORDER**

TS005	-	B	T	K	K	301	B	GR	O	-	W100
		ONE KEY OPERATION		CAP COLOR		BLOCK 1 LED COLOR		BLOCK 3 LED COLOR (for B Type)			
		D	DIRECT MODE (std.)	K		B	BLUE	B	BLUE		
		T	TOGGLE MODE	W		G	GREEN	G	GREEN		
		DM	DIRECT MODE WITH MOTOR			R	RED	R	RED		
		TM	TOGGLE MODE WITH MOTOR			W	WHITE	W	WHITE		
						Y	YELLOW	Y	YELLOW		
						O	ORANGE	O	ORANGE		
						X	WITHOUT	X	WITHOUT		

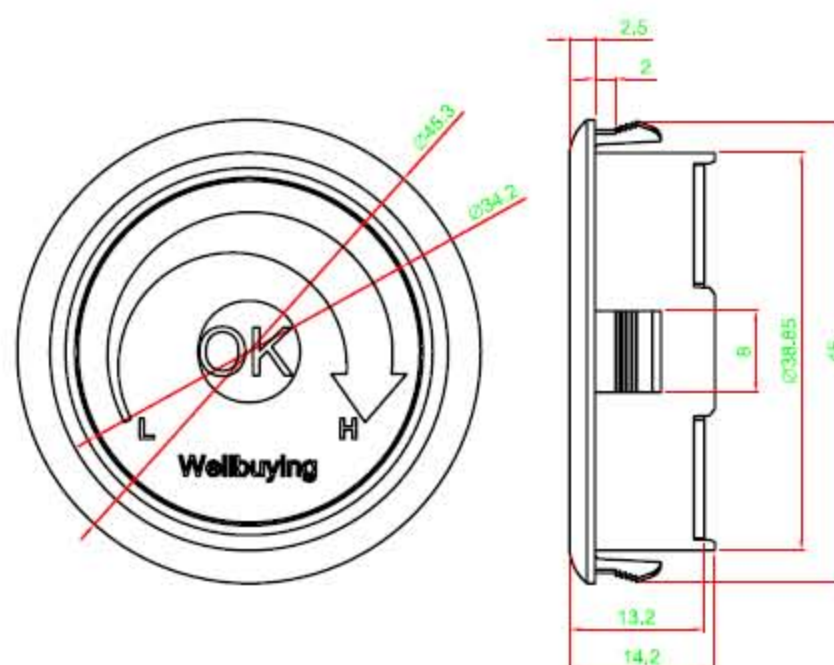


▶ DIMENSION & FRAME TYPE

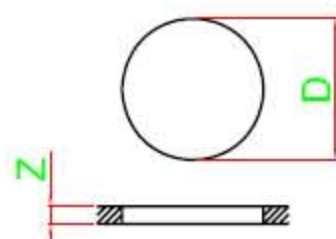
TS005 - AKK201BGRX-W100



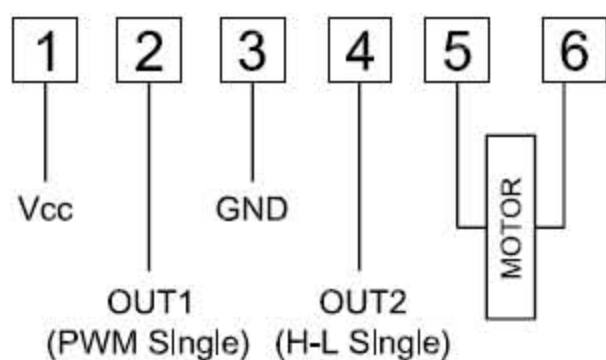
TS005 - BKK301BGRO-W100



▶ PANEL CUT OUT & CIRCUIT DIAGRAM



Z	D
1.0 ~ 2.0	33.1~33.3
2.0 ~ 2.5	33.3~33.7
2.5 ~ 3.0	33.7~34.0



▶ MATERIAL

- COVER : PC
- HOUSING : PA
- BASE FRAME : PA + GF
- P.C.B : FR4

▶ SCHEMATIC

