

SAFETY DOOR SWITCH

	ITEM NO.	CONTACTS	OPERATION KEYS	CERTIFICATES
	KSD- AB <input type="checkbox"/>	1A, 1B	H: Horizontal V: Vertical C: Adjustable	
	KSD- 2B <input type="checkbox"/>	2B		
	KSD- A <input type="checkbox"/>	1A		
	KSD- B <input type="checkbox"/>	1B		

EMERGENCY STOP

	ITEM NO.	MOUNTING HOLE		PROTECTION DEGREES	CERTIFICATES
	KSEP- 224 KSEP- 226	Φ 22 Φ 25 Φ 30	P: Non- illuminating B: Illuminating	IP65	
	KSEP- 254 KSEP- 256				
	KSEP- 304 KSEP- 306				
	KSEB- 254 KSEB- 256				
	KSEB- 224 KSEB- 226				
	KSEB- 304 KSEB- 306				

CONTROL COMPONENTS

MICRO SWITCH

FOOT SWITCH

LIMIT SWITCH

POWER SWITCH

HOIST SWITCH

CAM SWITCH

KSD Series SAFETY DOOR SWITCH

FEATURE

- IP67(with cable gland)
- Max, surrounding air temperature 40°C



KSD -
① ②

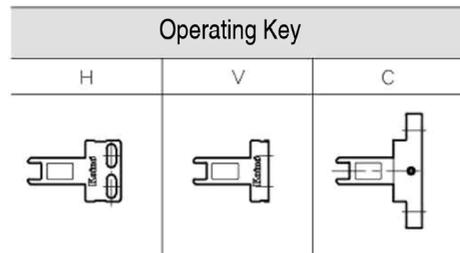
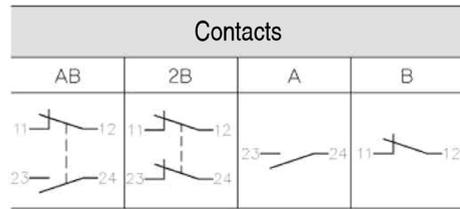
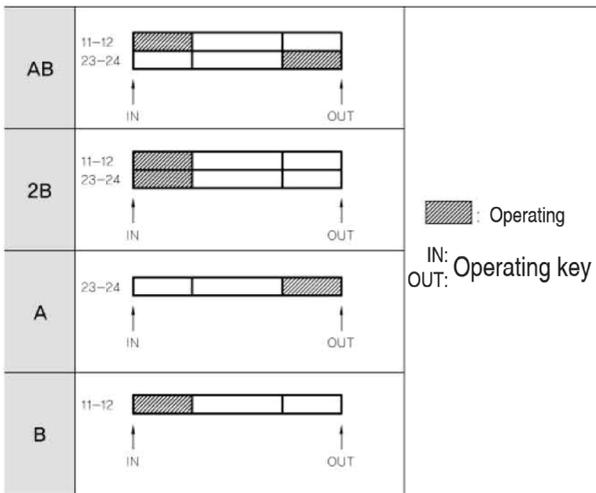
① Contacts Type	AB	1A, 1B
	2B	2B
	A	1A
	B	1B
② Operation Key	H	Horizontal
	V	Vertical
	C	Adjustable

* Direct opening structure is not available with Contact type "A"

Specification

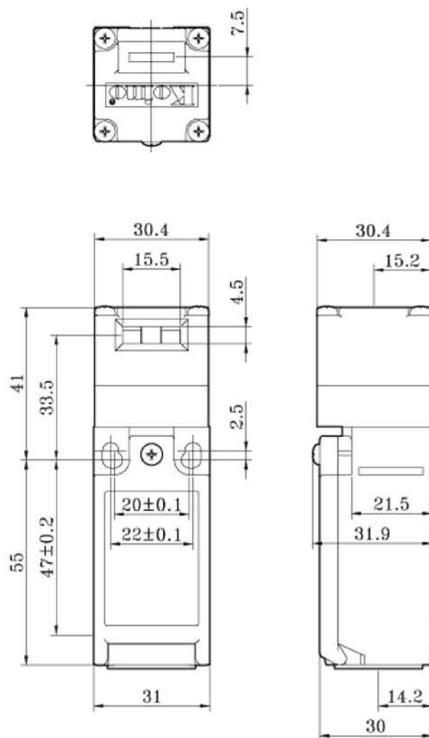
Ratings	250VAC 3A, 250VDC 0.27A, AC- 15, DC- 13	
Insulation resistance	100MΩ minimum (DC500V insulation resistance)	
Dielectric strength	Between contacts: 1,000VAC(50/60Hz)	
	Between contacts & non- current carrying parts 1,500VAC(50/60Hz) 1 min.	
Contact resistance	25mΩ max.(default)	
Rated insulation voltage	500V	
Vibration resistance	10 to 55Hz, 1.5mm X, Y, Z amplitude	
Shock resistance	30G(300 m/s ²) minimum	
Ambient temperature	- 30° C □+ 70° C (not frozen condition)	
Ambient humidity	45 □85% RH	
Durability	Mechanical: 1,000,000 operations. Electrical: 300,000 operations.	
Operating frequency	30operations per 1 minute	
Degree of protection	IP67(body)	
Direct opening force	60N	
Direct opening travel	10mm minimum	
Electric shock protection	Class II(double insulation)	
Pollution degree	3(EN60947- 5- 1)	
Impulse withstand voltage	Between terminals of same polarity	2.5kV(EN60947- 5- 1)
	Between terminals of different polarity	4kV(EN60947- 5- 1)
	Between other terminals & non-current carrying metallic parts	6kV(EN- 60947- 5- 1)
Conditional short-circuit current	100A(EN60947- 5- 1)	

Operation

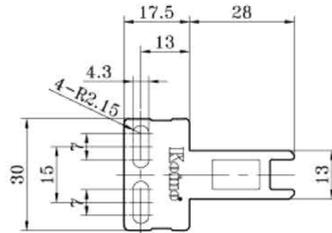


Dimension

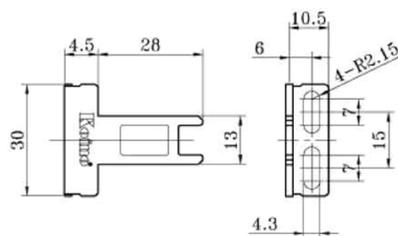
KSD Series



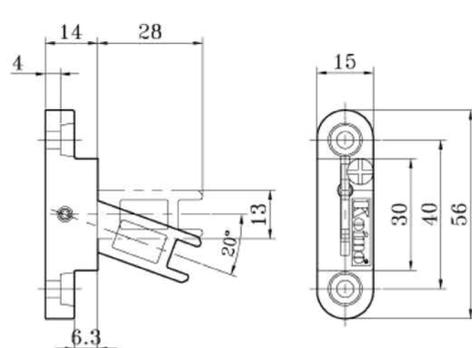
H Type



V Type

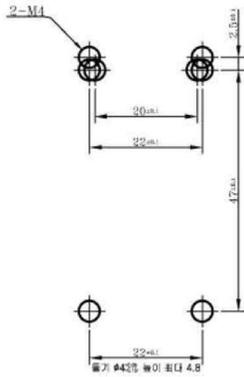


C Type

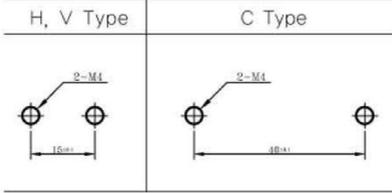


Mount & Install

■ Body mounting



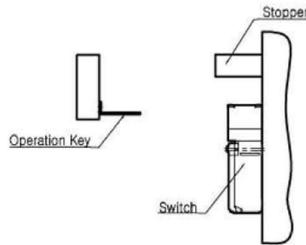
Operating Key



Tightening torque (Nm)

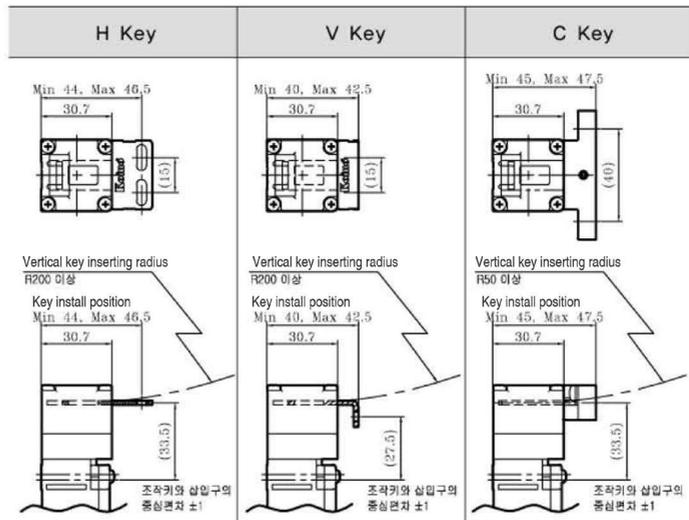
Contacts screw(M3)	0,6~0,8Nm
Body cover screw	0,5~0,7Nm
Head cover screw	0,5~0,6Nm
Body mounting screw(M4)	0,5~0,7Nm
Operating key screw	2,4~2,8Nm

■ Install Stopper



- * Do not use body as a stopper
- * Mount the stopper to prevent the operating key from reaching the head

■ Install operating key



- * Use cable gland for connect cable
- * Key insert force: 15N max. , extraction force: 30N max.

Precaution

- The above values are initial values.
- Do not operate key inserting hole away from metal scrap, oil, water, chemical gases.
- Keep the key inserting hole away from metal scrap, oil, water, chemical gases.
- The degree of protection is tested using the method specified by the standard(EN60947- 5- 1). Confirm that sealing properties are sufficient for the operating conditions and environment beforehand.
- The durability is for an ambient temperature of 5 to 35°C and an ambient humidity of 40% to 70%.
- Do not exceed 50%RH if the temperature is more than 40°C.

EMERGENCY STOP SWITCH

KSE Series Emergency Stop Switch

Dimensions

- Illuminating, Non- illuminating type available
- Direct opening mechanism
- IP67(Front panel side)
- Momentary, Alternate push button

KSE Series



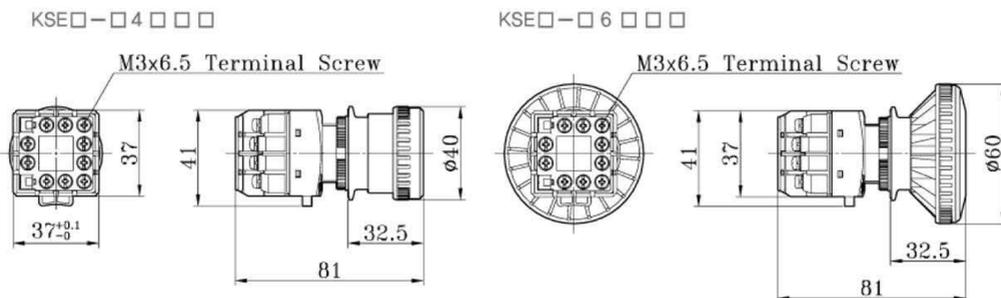
KSE -
 ① ② ③ ④ ⑤ ⑥

① LED lamp	P	Push button
	B	Illuminating Push button(LED)
② Panel hole cut size	22	Φ 22mm
	25	Φ 25mm
	30	Φ 30mm
③ Button head	4	Φ 40mm
	6	Φ 60mm
④ LED Input voltage	1C	DC 6V
	2C	DC 12V
	3C	DC 24V
	1A	AC 110V
	2A	AC 220V
⑤ NO contacts	0	None
	1	1a
	2	2a
⑥ NC contacts	1	1b
	2	2b
	3	3b
	4	4b

*NO contacts: 2 max., NC contacts: 3 max.

Total number of contacts: 4 max.

Dimensions



EMERGENCY STOP SWITCH

Specification

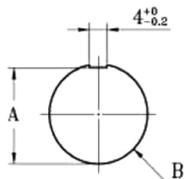
Contact rating	250VAC 3A (Resistance load)
Insulation resistance	100MΩ minimum (DC 500V megger)
Contact resistance	50mΩ maximum (Default)
Dielectric strength	Between terminals of same polarity: 2,500VAC(50/60Hz) for 1 min.
Vibration resistance	10 to 55Hz, double amplitude 1.5mm X, Y, Z axis for 1 hour
Shock resistance	Durability: 100G(1,000 m/s ²) minimum Malfunction: 15G(150m/s ²) minimum
Operating frequency	900/hour
Durability	Mechanical: 250,000 operations. Electrical: 100,000 operations(15/minute)
Degree of protection	IP66(Terminal screw:IP20)
Ambient operating temperature	- 25°C to 50°C (not frozen condition)
Ambient temperature(Idle)	- 25°C to 80°C (not frozen condition)
Ambient operating humidity	45% to 85% RH
Switch contacts	NO/NC Direct opening mechanism
Push button	Push & turn to reset, Push & Pull to reset
Minimum operation force	5Kg f(49N)
Direct opening travel	minimum 3.8mm, maximum 4.5mm

Connection



	TOP	BOTTOM	LEFT	RIGHT	
1A		●			
2A	●	●			
1B				●	
2B			●	●	
3B	●		●	●	
4B	●	●	●	●	
1A1B		●		●	"BOTTOM" A contact
1A2B		●	●	●	"BOTTOM" A contact
1A3B	●	●	●	●	"BOTTOM" A contact
2A1B	●	●		●	"TOP" "BOTTOM" A contact
2A2B	●	●	●	●	"TOP" "BOTTOM" A contact

Hole Cut



	A	B
KSE22	21.5~21.7mm	22.2~22.5mm
KSE25	24~24.3mm	25.2~25.5mm
KSE30	29~29.3mm	30.2~30.5mm

Precautions

- Check the wire connection before operation
- Loose screws may result in malfunction, overrating and fire. Confirm the tightening torque 0.6 to 1.0 Nm

