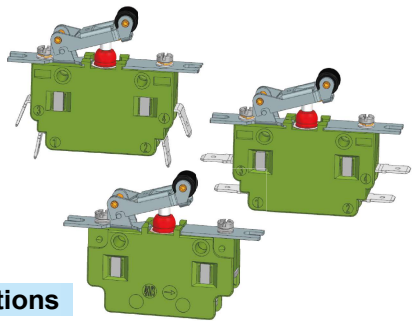
HFW846 SNAP-ACTION SWITCHES

File No.:
2024010305710743



Features

- Bridge contact,Positive opening operation, Wipe action
- Magnetic blowout
- Electrical isolation
- Meets GB/T 14048.5(IEC 60947) reinforce insulation
- Meets GB/T 21413(IEC 60077)reinforce insulation

Typical Applications

Rail transit vehicles, such as button switch, toggle switch, door system, master controller

RoHS compliant

CONTACT DATA

Contact arrangement		Zb
Contact resistance[1)]		100mΩ max.
Contact material		Silver alloy
Contact load	Inductive	110VDC/1.0A 230VAC/1.5A
	Resistive	110VDC/1.0A
Heating current		10A
Mechanical durability		5×10^6OPS
Electrical endurance	Inductive	110VDC/1.0A, 2×10^5OPS
	Resistive	110VDC/1.0A, 6×10^5OPS

Notes:1) The data shown above are initial values.

CHARACTERISTICS

Insulation resistance	＞5MΩ(500VDC)
Dielectric strength	1890VAC 60s
Impulse voltage	2500VAC(1.2/50μs)
Vibration resistance	70 m/s²(5Hz to 150Hz)
Shock resistance	300 m/s²
Relative humidity	98%RH，40℃
Temperature range	-40 ℃ to 85 ℃
Termination	QC, Screw
Unit weight	20g to 40g
Construction	No dustproof, Dustproof,Plastic sealed

Notes:1) The data shown above are initial values.

ACTUATOR POSITION

Unit: mm

Free position[1)]	Operating position[1)]	Release position[1)]	The travel position for positive opening operation[1)]	Total travel position[1)]
8.85±0.15	6.6±0.25	8.0±0.25	4.2	3.9
20.25±0.35	16.9±0.5	19.0±0.5	13.5	13

Notes:1) The data shown above are initial values;
2) To ensure the function of the switches, please make sure that there is gap between customer's actuator and roller lever (or push button) when the switches is on free position, and actuation of the switches at least exceed the specified positive opening travel when the switches is operated.

ORDERING INFORMATION

HFW846 / □ □ □ □ □ □ □

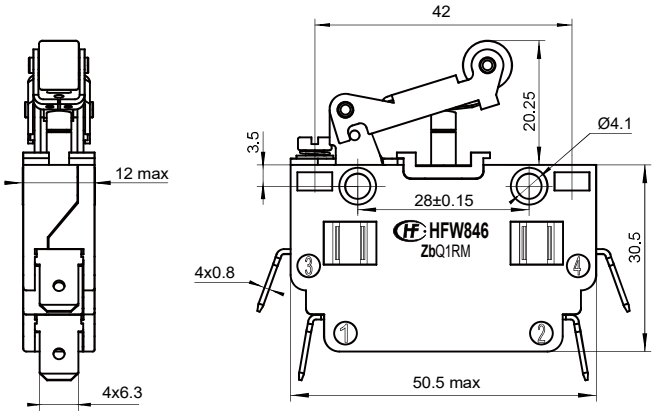
Type	
Contact arrangement	**Zb:** Z-SPDT-DB
Construction	**Nil:** No dustproof **F:** Dustproof **S:** Plastic sealed
Termination	**Q1**: Bent QC **Q2**: Straight QC **C:** Screw
Actuator	**Nil:** Push button **R:** Roller lever
Installation method	**Nil:** No mounting plate **B1:** Mounting plate with slotted holes **B2:** Mounting plate with round holes
Magnetic blowout	**Nil:** No magnetic blowout **M:** With magnetic blowout
Special code	**XXX:** Customer special requiremen **Nil:** Standard

OUTLINE DIMENSIONS, WIRING DIAGRAM AND INSTALLATION DIMENSIONS

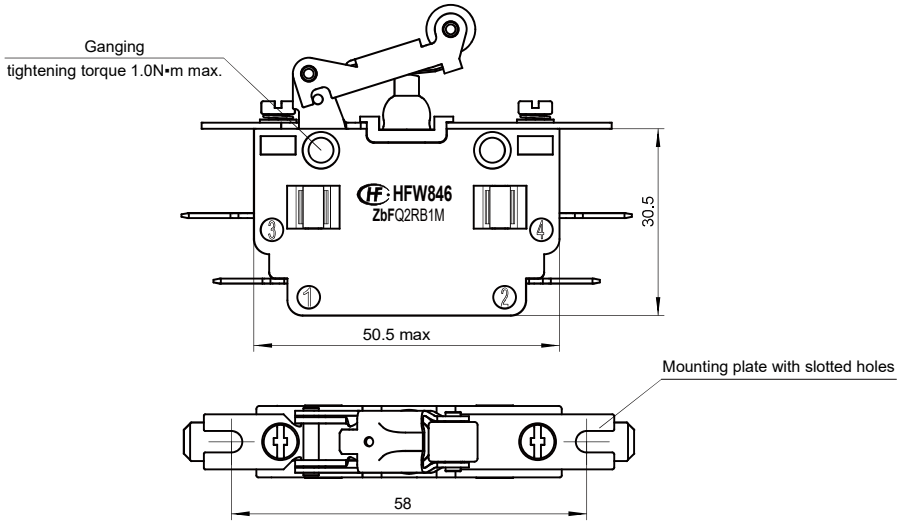
Unit: mm

Outline Dimensions

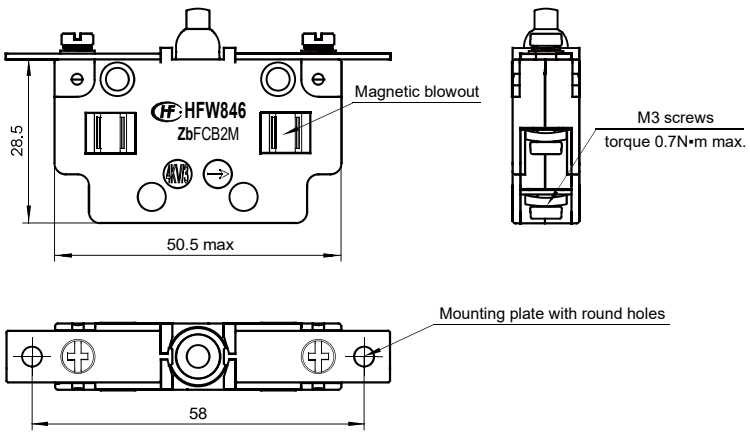
Roller lever(Q1)



Roller lever(Q2)



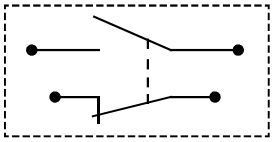
Push button



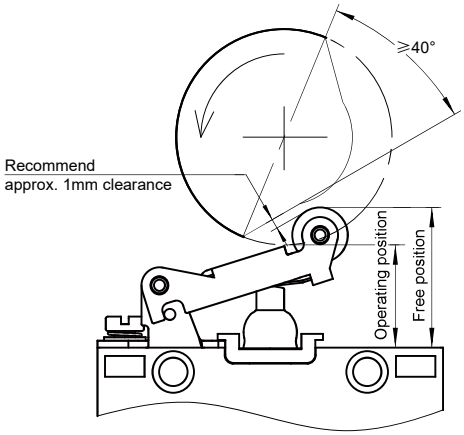
OUTLINE DIMENSIONS, WIRING DIAGRAM AND INSTALLATION DIMENSIONS

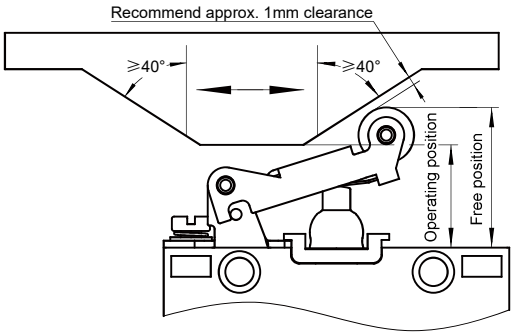
Unit: mm

Wiring Diagram



Installation Dimensions





Precautions For Use：

1) When mounting the switches, please make sure that at least 2 positions are fastened， and compliant to the specified torque.
2) Please avoid tilting the screw when mounting,in order to prevent mechanical tension on the housing.
3) To ensure the function of the switches, please make sure that there is gap between customer's actuator and roller lever (or push button) when the switches is on free position, and actuation of the switches at least exceed the specified positive opening travel when the switches is operated.
4) To prevent mechanical destruction of the switches, please make sure that actuation of the switches does not exceed the specified total travel position.
5) When using the versions with magnets, if necessary please consult the polarity with Hongfa's engineer.
6) Cleaning agents, adhesives, solvents, or screw-retaining varnish must be compatible with polycarbonate. Never use chemicals not compatible with polycarbonate.
7) It is necessary to use insulating plates when ganging or mounting the switches on uninsulated surfaces.
8) Snap-action switches should be mounted by qualified professional staff only.

LIST OF PROHIBITED AND RESTRICTED SUBSTANCES FOR CHEMICALS

List type	Chemicals	Notes
Blacklist	LOCTITE243	Prohibited from direct contact with snap switch surfaces
	LOCTITE263	
	LOCTITE609	
	Calcium-based grease	
	Engine oil	
	Gasoline	
	LOCTITE755 Cleaner	
	WURTH Metal Parts Cleaner BRAKE CLEANER	
	Ruibao Surface Oil Cleaner RSB-811	
Whitelist	LOCTITE480	Allowed on the surface and surrounding areas of snap switch housings, but ensure chemicals or volatile matter do not enter the housing interior
	Anhydrous ethanol	
	White lubricant EM-60L Grease	
	Water	Allowed on the surface and surrounding areas of snap switch housings, but ensure water does not enter the housing interior
Special Category	LOCTITE406	Allowed for quantitative use on the surface of snap switch housings (no more than 1/1000 mL) and in surrounding areas, but ensure chemicals or volatile matter do not enter the housing interior
	LOCTITE460	
	WURTH Medium-strength screw adhesive	Prohibited from direct contact with snap switch surfaces
	WURTH High-strength screw adhesive	

Others:

1) Blacklist chemicals are strictly prohibited from use on snap switch surfaces and are forbidden for use at close proximity without protection.
2) Whitelist chemicals are permitted for use on snap switch surfaces, but verification is required if the supplier or brand is changed.
3) Special chemicals are allowed for strict use in specific locations according to specialized processes (must not be used beyond the specified scope).
4) Chemicals not listed in this list shall be treated as blacklist materials until verified.
5) Different batches of the same chemical must be re-verified before use.
6) The whitelist chemicals listed above must be confirmed as uncontaminated.

DisclaimerThe
We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.

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