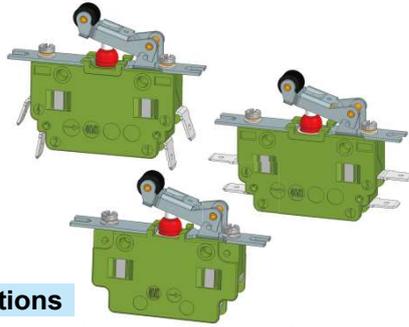


# HFW846

# SNAP-ACTION SWITCHES



File No.:  
2020000305000179



### 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 <sup>1)</sup> | 100mΩ max.            |                                    |
| Contact material                 | Silver alloy          |                                    |
| Contact load                     | Inductive             | 110VDC/1.0A<br>230VAC/1.5A         |
|                                  | Resistive             | 110VDC/1.0A                        |
| Heating current                  | 10A                   |                                    |
| Mechanical durability            | 5×10 <sup>6</sup> OPS |                                    |
| Electrical endurance             | Inductive             | 110VDC/1.0A, 2×10 <sup>5</sup> OPS |
|                                  | Resistive             | 110VDC/1.0A, 6×10 <sup>5</sup> OPS |

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/s <sup>2</sup> (5Hz to 150Hz)      |
| Shock resistance      | 300 m/s <sup>2</sup>                    |
| Relative humidity     | 98%RH, 40°C                             |
| Temperature range     | -40 °C to 85 °C                         |
| 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 <sup>1)</sup> | Operating position <sup>1)</sup> | Release position <sup>1)</sup> | The travel position for positive opening operation <sup>1)</sup> | Total travel position <sup>1)</sup> |
|-----------------------------|----------------------------------|--------------------------------|--|-------------------------------------|
| 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

|                     |   |                          |                          |                          |                          |                          |                          |
|---------------------|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Type                | HFW846 /  | <input type="checkbox"/> |
| Contact arrangement | Zb: Z-SPDT-DB   |                          |                          |                          |                          |                          |                          |
| Construction        | Nil: No dustproof F: Dustproof<br>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<br>B2: Mounting plate with round holes |                          |                          |                          |                          |                          |                          |
| Magnetic blowout    | Nil: No magnetic blowout M: With magnetic blowout   |                          |                          |                          |                          |                          |                          |
| Special code        | XXX: Customer special requiremen Nil: Standard  |                          |                          |                          |                          |                          |                          |



HONGFA RELAY

ISO9001, IATF16949, ISO14001, ISO45001, IECQ QC 080000 CERTIFIED

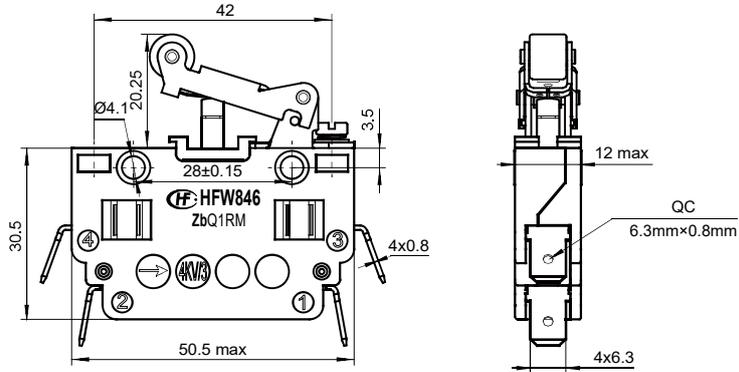
2024 Rev. 1.00

# OUTLINE DIMENSIONS, WIRING DIAGRAM AND INSTALLATION DIMENSIONS

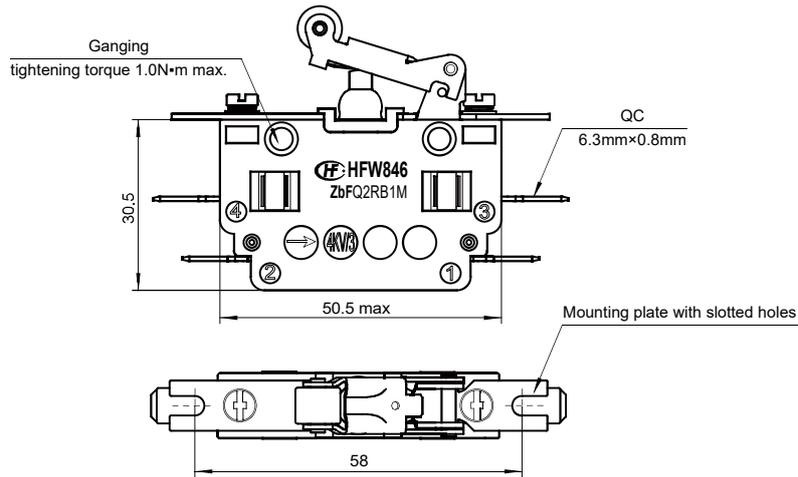
Unit: mm

## Outline Dimensions

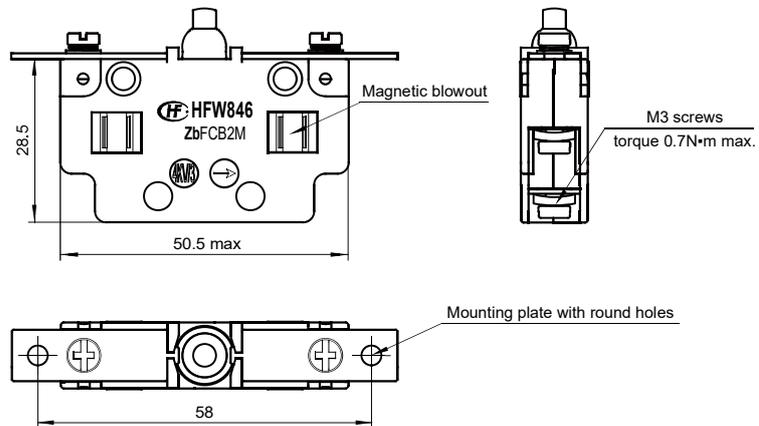
### Roller lever(Q1)



### Roller lever(Q2)



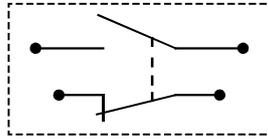
### Push button



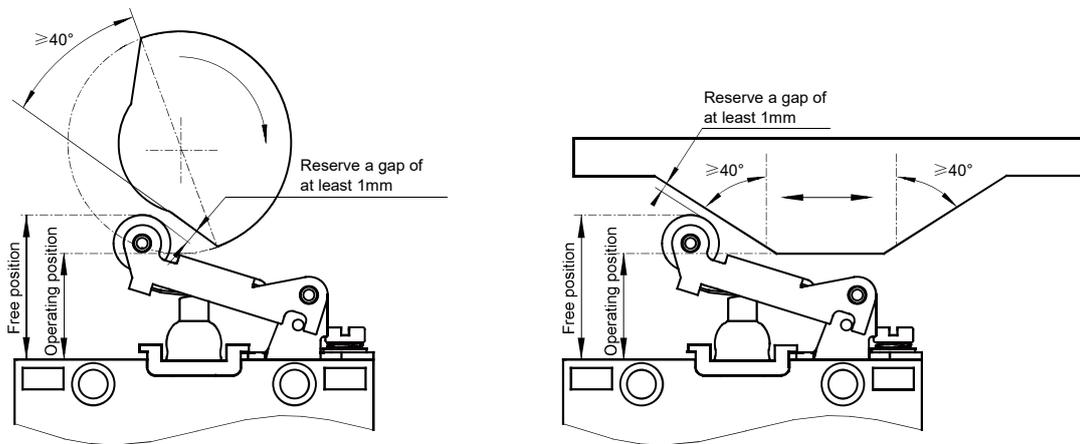
## OUTLINE DIMENSIONS, WIRING DIAGRAM AND INSTALLATION DIMENSIONS

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.

### Disclaimer

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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