

4-CH U-shaped Type

■ Features

- Highly reliable 4 channel detection
- High-speed response time under 1 ms
- Built-in reverse polarity protection circuit and output short overcurrent protection circuit
- IP65 protection structure (IEC standard)

⚠ Please read "Safety Considerations" in the instruction manual before using.



■ Specifications

Model	BUM4-40D-W-4M	BUM4-40D-W-2M/A	BUM4-40D-W-3M/A	BUM4-40D-W-4M/A	BUM4-40D-W-2M/B	BUM4-40D-W-3M/B	BUM4-40D-W-4M/B
Sensing type	Through-beam						
Sensing distance	40mm						
Sensing target	Opaque materials of min. Ø4.0mm						
Sensing CH	4 channels						
Hysteresis	Max. 1ms						
Power supply	18-35VDC±10% (ripple P-P: max. 10%)						
Current consumption	Max. 50mA						
Light source	Infrared LED (940nm)						
Operation mode	Dark ON						
Control output	NPN open collector output (individual 4 outputs) • Load voltage: max. 35VDC±, • Load current: max. 100mA, • Residual voltage: max. 4VDC±						
Protection circuit	Reverse polarity protection circuit, output short overcurrent protection circuit						
Indicator	Output indicator: red LED, power indicator: green LED						
Insulation resistance	Over 20MΩ (at 500VDC megger)						
Noise immunity	±240V the square wave noise (pulse width 1μs) by noise simulator						
Dielectric strength	1000VAC 50/60Hz for 1 min						
Vibration	1.5mm amplitude at frequency of 10to 55Hz (for 1 min) in each X, Y, Z direction for 2 hours						
Shock	500m/s ² (approx. 50G) in each X, Y, Z direction for 3 times						
Environment	Ambient illumination	Sunlight: max. 11,000lx, incandescent lamp: max. 3,000lx (receiver illumination)					
	Ambient temperature	-25 to 65°C, storage: -25 to 70°C					
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH					
Protection	IP65 (IEC standards)						
Material	Case, cover: ABS						
Cable	Ø6.0mm, 8-wire (AWG 22, core diameter: Ø1.2mm, number of cores: 60)						
Cable length	4m	2m	3m	4m	2m	3m	4m
Bracket	—	H01/H04 (G01)			H03/H04 (G02)		
Accessory	M12 bolt: 4, M12 nut: 4, M5 bolt: 2						
Approval	CE						
Weight ^{※1}	Approx. 510g (approx. 500g)		Approx. 1.5kg (approx. 500g)				

※1: The weight is with packaging and the weight in parenthesis is only unit weight.

※ The temperature or humidity mentioned in Environment indicates a non-freezing or condensation environment.

■ Operation Mode

Operaiton mode	Dark ON
Receiver operation	Received light Interrupt light
Operation indicator (LED)	ON OFF
Transistor output	ON OFF

SENSORS

CONTROLLERS

MOTION DEVICES

SOFTWARE

(A) Photoelectric Sensors

(B) Fiber Optic Sensors

(C) LIDAR

(D) Door/Area Sensors

(E) Vision Sensors

(F) Proximity Sensors

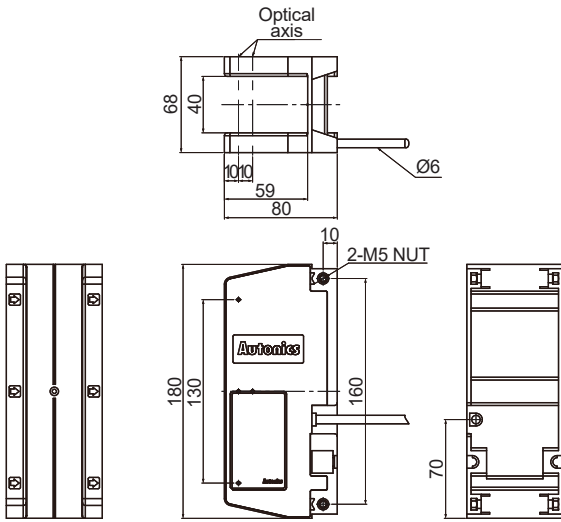
(G) Pressure Sensors

(H) Rotary Encoders

(I) Connectors/ Connector Cables/ Sensor Distribution Boxes/ Sockets

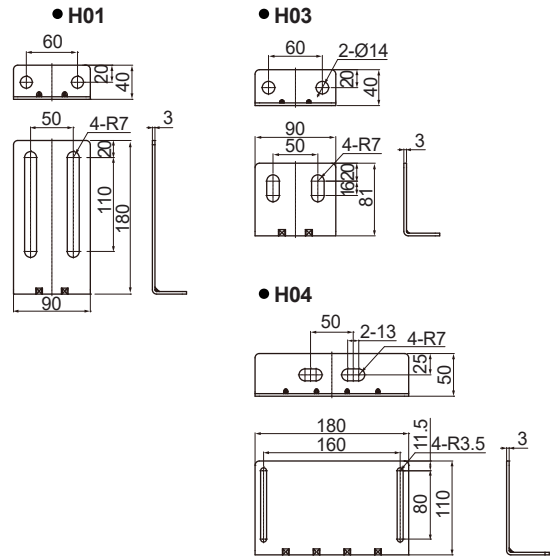
BUM Series

Dimensions

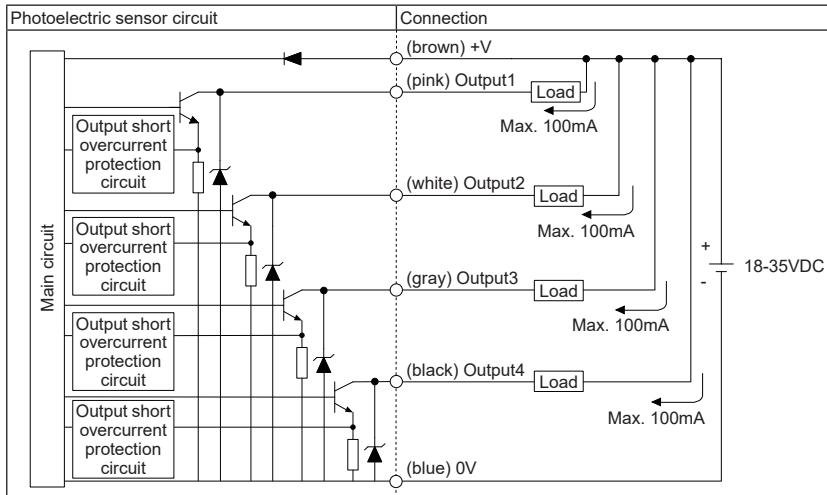


Bracket

(unit: mm)



Control Output Diagram



※If short-circuit the control output terminal or supply current over the rated specification, normal control signal is not output due to the output short over current protection circuit.

Connections

