

NEW

4-CH U-shaped Type

■ Features

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



⚠ Please read "Caution for your safety" in operation 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. 4V						
Protection circuit	Power reverse polarity protection circuit, output short-circuit over current protection circuit						
Indicator	Output indicator: red LED, Power indicator: green LED						
Insulation resistance	Max. 20MΩ (at 500VDC megger)						
Noise resistance	±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 of X, Y, Z directions for 2 hours						
Shock	500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times						
Environment	Ambient illumination	Sunlight: Max. 11000lx, Incandescent lamp: Max. 3000lx (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: Ø1.2, number of cores: 60)						
Cable length	4m	2m	3m	4m	2m	3m	4m
Bracket	—	H01/H04 (G01)			H03/H04 (G02)		
Approval	CE						
Weight	Approx. 510g (approx. 500g)		Approx. 1.5kg (approx. 500g)				

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

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

■ Operation Mode

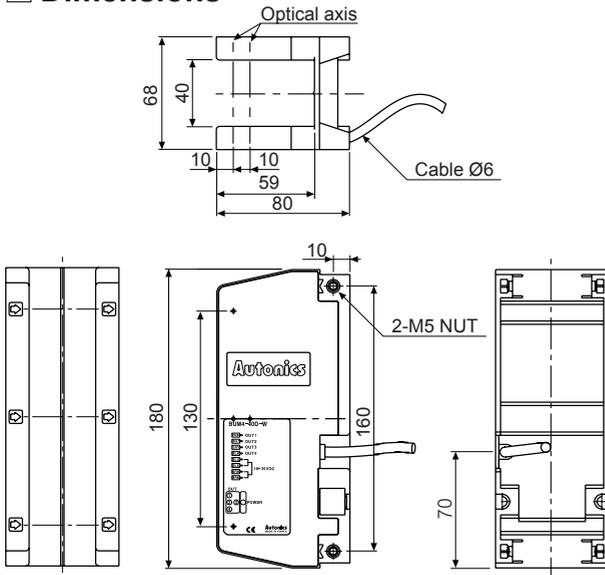
Operaiton mode	Dark ON
Receiver operation	Received light  Interrupt light
Operation indicator (LED)	ON  OFF
Transistor output	ON  OFF

When shorting control output terminal or flow over the rated current, protection circuit operates and normal signal is not output.

(A)	Photoelectric Sensors
(B)	Fiber Optic Sensors
(C)	Door/Area Sensors
(D)	Proximity Sensors
(E)	Pressure Sensors
(F)	Rotary Encoders
(G)	Connectors/ Connector Cables/ Sensor Distribution Boxes/ Sockets
(H)	Temperature Controllers
(I)	SSRs / Power Controllers
(J)	Counters
(K)	Timers
(L)	Panel Meters
(M)	Tacho / Speed / Pulse Meters
(N)	Display Units
(O)	Sensor Controllers
(P)	Switching Mode Power Supplies
(Q)	Stepper Motors & Drivers & Controllers
(R)	Graphic/ Logic Panels
(S)	Field Network Devices
(T)	Software

BUM Series

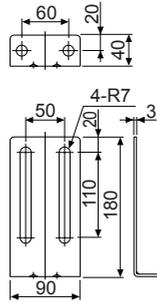
Dimensions



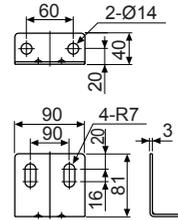
Bracket

(unit: mm)

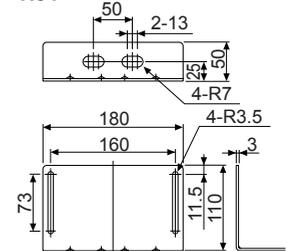
• H01



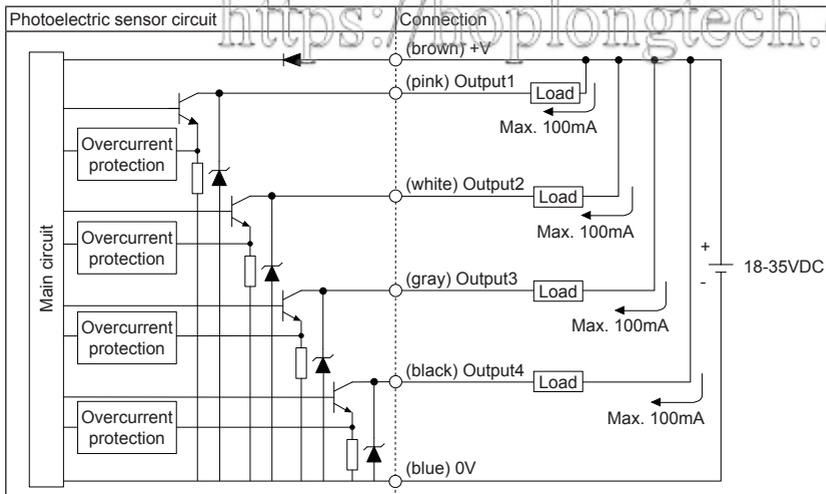
• H03



• H04



Control Output Diagram



Connections

