

Wire Sensor

for Debris Flow Detection



- Capable of direct detection of debris flow (mud flow)
- Detected signal output as an alert
- Simple structure and high durability



This sensor detects the occurrence of a debris flow, using a wire stretched across a mountain stream, when the debris flow (mud flow) passes through and cuts the wire. By stretching multiple wires (maximum 5 survey lines) vertically, the scope can be estimated.

In addition, by installing the sensor in a location where a debris flow occurrence is anticipated, it is possible to alert people in the neighborhood area with a siren or a rotary beacon light as soon as the occurrence is detected, helping people's caution and smooth evacuation.

Specifications

Wire sensor

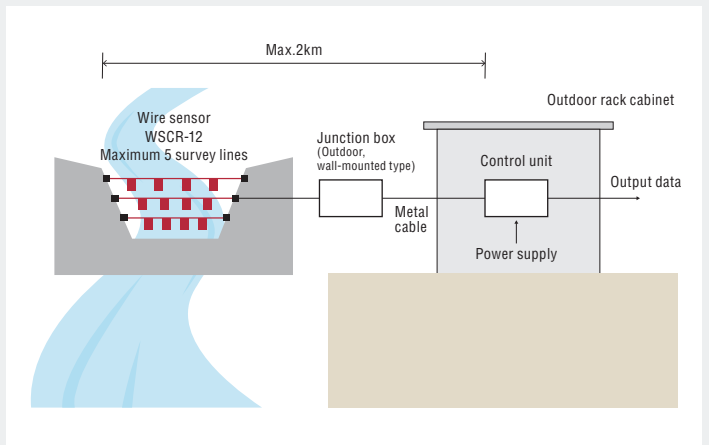
Model	WSCR-12	
Constitution	Signal line×2c	Support line×1c
Signal line	A)Material	JIS C3102 annealed copper wire for electricity
	B)Outside diameter	φ0.9mm
	C) Conductor resistance	29.2Ω/km (at 20°C)
	D) Mechanical characteristic	Tensile strength 28kg/mm ² or less
	E)Elongation percentage	20% or more
Support line	A)Material	Galvanizing steel wire
	B) Outside diameter	1.2mm
	C) Tensile strength	141kg/mm ²
Insulator	A) Material	Polyethylene (Color: Red)
	B) Standard thickness	0.95mm
Dimensions	7.5W×2.8D mm	

Wire sensor control device

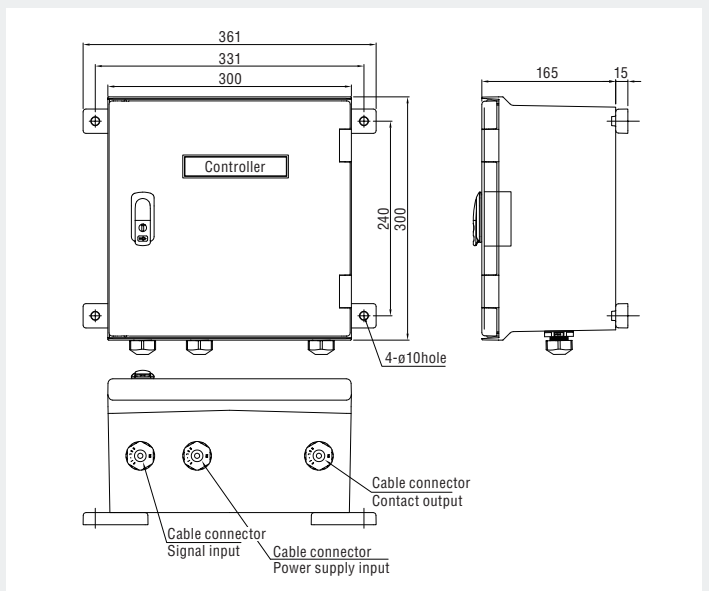
Model	GWD2-2B	GWD2-5B		
Input	Wire sensor	2 channels	Wire sensor	5 channels
	Wire sensor signal	2 channels	Wire sensor signal	5 channels
	Parity signal	1 channel		
	Start signal	1 channel		
	Power supply voltage drop	1 channel		
	Alarm signal output (Voltage output)	2 channels		
	Function	Input signal check Monitor display (LED) for checking output signal Alarm signal output time setting (None, 1min, 2mins, 5mins, 10mins, continuous)		
Power supply	DC 12V (10.5 to 16.5V) DC 24V (21.0 to 26.0V)			
Current consumption	1mA or less (DC 12V)			
	2mA or less (DC 24V) * At standby			
Environmental condition	Ambient temperature	-10 to 40 °C		
	Ambient humidity	30 to 90% (No condensation)		
Construction	Outdoor wall-mounted			
Material	Resin			
Dimensions	300W×300H×165Dmm (excluding protruding parts)			
Mass	4.5kg or less			

(output voltage is the same voltage as power source input voltage)

Configuration diagram



Wire sensor control device



Wire sensor

