BIG RECTANGULAR INDUCTIVE PROXIMITY SENSOR

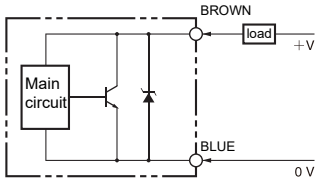
SN-50 SERIES

- Many kinds of outputs choice, covered most of cases
- Simple installation, can be used for high-speed pulse generator, high-speed rotation control, etc.
- Easy to check indicator, easy to know working status.
- Installed easily, and excellent performance.
- Dual LED indicators, Built-in terminal type or connector mounting type connections.

Detection mode	connection mode	Detection	output	Output model
Positive detection	50mm	AC2 OUTPUT	NO	SN-50AC
		NPN OUTPUT	NO	SN-50N
		PNP OUTPUT	NO	SN-50P
Positive detection	Wire lead-out type 50mm	DC2 OUTPUT	NO	SN-50B
		NPN OUTPUT	NO+NC	SN-50NC
		PNP OUTPUT	NO+NC	SN-50PC

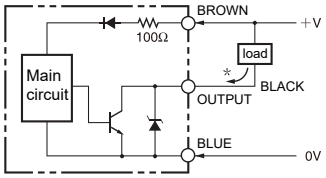
Circuit Diagram

DC OUTPUT



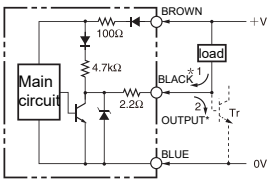
Note. The load can be connected on either side of+V or OV.

NPN OUTPUT



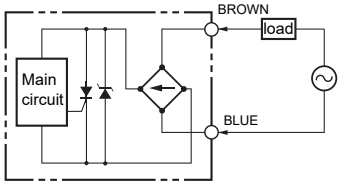
* Under 50mA (load current) ...

PNP OUTPUT

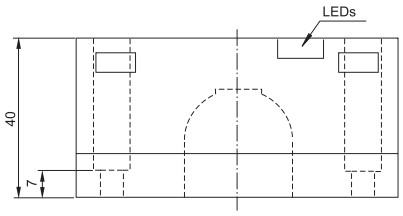


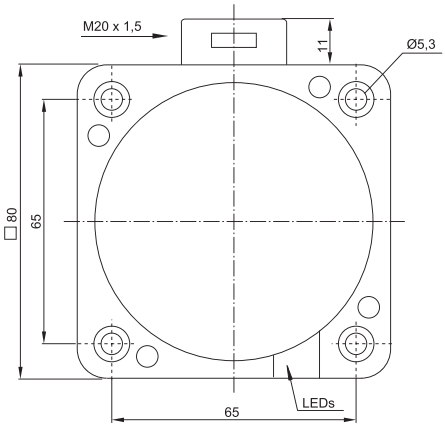
* 1.200mA or less (load current)
* 2.1 When connecting mATr circuit

PNP OUTPUT



Installation dimension drawing





Rating/ performance		
DC 3-wire type		
Model		SN-50□
Detection distance		50mm±10%
Set distance		0～50mm
Backward distance		Less than 10% of the detection distance
Detection object		Magnetic (non-magnetic) metals will reduce the detection distance. Refer to "Property Data")
Standard test object		Iron 30×30×1mm
Response time		Under 2ms
Response frequency*		150Hz
Power supply voltage (use voltage range)		DC12～24V ripple (p-p)10% below DC10～30V
rated current		2000mA below
Control output	Switching capacity	Open collector NPN below 50mA
	residual voltage	(DC30V) below 1V (load current 50mA and conductor length 2m) detection display
display lamp		Detection display (Red)
Action state (when detecting object approaching)		See the time chart of "Input/Output Circuit Diagram" for details.
Circuit protection		Reverse connection protection, surge absorption
Ambient temperature		Working time and storage time:-25 ~+70 C (no freezing and condensation); working time and storage
Ambient humidity		-35 ~ 95% RH (no condensation)
Temperature effect		Within the temperature range of-25 ~+70 C, the detection distance at ±23°C is less than 20%
Voltage effect		Within the range of 10% of rated power supply voltage, the detection distance at rated power supply voltage is less than 2.5%
Insulation resistance		50M above
Withstand voltage		AC500V 50/60Hz 1min
Vibration (durability)		10～55Hz Up and down amplitude 1.5mmX、Y、Z each directions 2 hours
Impact (durability)		200m/s^2 X、Y、Z each directions 10 times
Protective structure		IEC standard IP67
Connection method		Wiring 2M length cable (standard)
Weight		Approx. 160g
Materials	Housing	Anti-heat ABS
	Sens. face	
Annex		Use manual

* The response frequency of DC switch unit is the average value.