









Inductive Proximity Ring Type Sensors

10mm Sensing Range

NAMUR

Ring

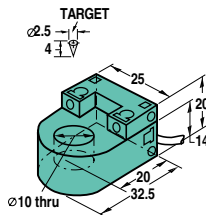
Specifications		NAMUR			
SENSING RANGE		10mm	10mm	10mm	10mm*
SHIELDED		—	—	—	—
MODEL NUMBER(S)		RC10-14-N0	RC10-14-N3	RJ10-N	RJ10-N-A93
		—	—	—	—
OUTPUT		NAMUR	NAMUR	NAMUR	NAMUR
LOAD CURRENT	Target Present	≤1mA	≤1mA	≤1mA	≤1mA
	Target Absent	≥3mA (15mA max.)	≥3mA (15mA max.)	≥3mA (15mA max.)	≥3mA (15mA max.)
SHORT CIRCUIT AND OVERLOAD PROTECTION		Yes	Yes	Yes	Yes
REVERSE POLARITY PROTECTION		Yes	Yes	Yes	Yes
SUPPLY VOLTAGE		5-25VDC	5-25VDC	5-25VDC	5-25VDC
LED(s)		No	No	No	No
REPEATABILITY		≤.01mm	≤.01mm	≤.01mm	≤.01mm
HYSTERESIS		3-15%(5% typical)	3-15%(5% typical)	3-15%(5% typical)	3-15%(5% typical)
SWITCHING FREQUENCY		2kHz	2kHz	2kHz	2kHz
ELECTROMAGNETIC COMPATIBILITY COMPLIANCE		NEMA ICS5-2000 See page 6	NEMA ICS5-2000 See page 6	NEMA ICS5-2000 See page 6	NEMA ICS5-2000 See page 6
PROTECTION IEC		IP67	IP67	IP67	IP65
AMBIENT TEMPERATURE		-14°F to +158°F	-14°F to +158°F	-14°F to +158°F	-14°F to +158°F
HOUSING MATERIAL		Crastin	Crastin	Crastin	Crastin
APPROVALS    	General Purpose	Yes	Yes	Yes	Yes
	Intrinsically Safe	Yes	Yes	Yes	Yes
	Nonincendive	Yes	Yes	Yes	No
	Intrinsically Safe	Yes	Yes	Yes	No
	General Purpose	Yes	Yes	Yes	Yes
	Intrinsically Safe	Yes	Yes	Yes	No
	Intrinsically Safe	Yes	Yes	Yes	No
	Intrinsically Safe	Yes	Yes	Yes	No
ELECTRICAL CONNECTION		 2-meter cable, PVC covered, 2-conductor, #26AWG	 2-meter cable, PVC covered, 2-conductor, #26AWG	 2-meter cable, PVC covered, 2-conductor, #26AWG	 2-meter cable, PVC covered, 2-conductor, #26AWG

Dimensions (mm)

 Crastin

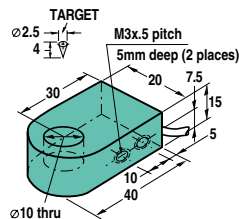
*Adjustable sensitivity

Classic Series RC10-14-N0 RC10-14-N3†

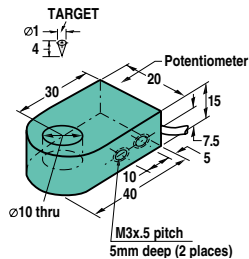


†Bi-stable ring sensors provide a latching output. The output latches as a target passes through the ring and does not unlatch until the target passes through the sensor in the opposite direction. The RC10-14-N3 and RC15-14-N3 can be used with any P+F switch isolator.

Classic Series RJ10-N

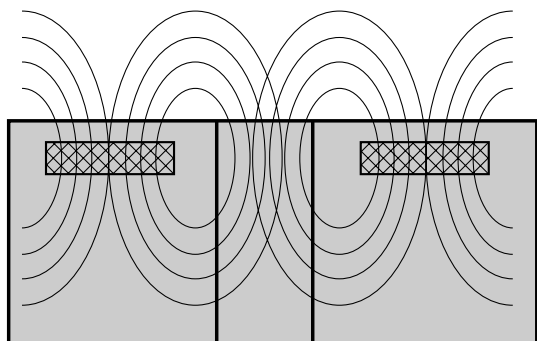


Classic Series RJ10-N-A93 (Adjustable sensitivity)



Inductive Proximity Sensors Ring Type

NAMUR
3-Wire DC
Surface Mount
Sensing Range
10mm to 43mm



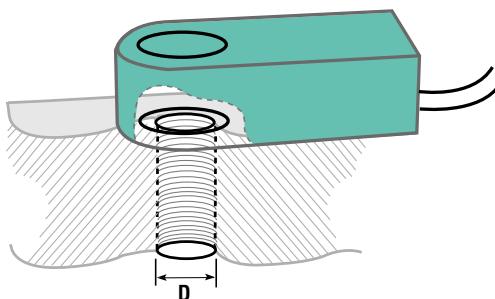
P+F ring type inductive proximity sensors have an electromagnetic field concentrated inside the ring. The sensor is activated when a metal target enters the ring. The target should be as large or larger than the target specified with each model.

Bi-stable ring sensors provide latching outputs. The outputs latch as a target passes through the ring and do not unlatch until the target passes through the sensor in the opposite direction. The RC10-14-N3 and RC15-14-N3 can be used with any P+F switch isolator.

MOUNTING GUIDELINES

These guidelines apply to all inductive ring sensors, regardless of output. The following diagram depicts a ring sensor flush-mounted on a steel plate. The given diameter allowances for the cut-out in the steel plate are required for optimal sensor performance.

Model	Recommended Diameter (D)
RJ10	≥Ø18 mm
RJ15	≥Ø32 mm
RJ21	≥Ø40 mm
RJ43	≥Ø120 mm



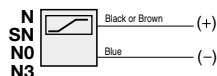
Wiring Diagrams

NAMUR



Cable Connection

Note: Output state is determined at controlling device or P+F amplifier



3-Wire DC



Cable Connection

