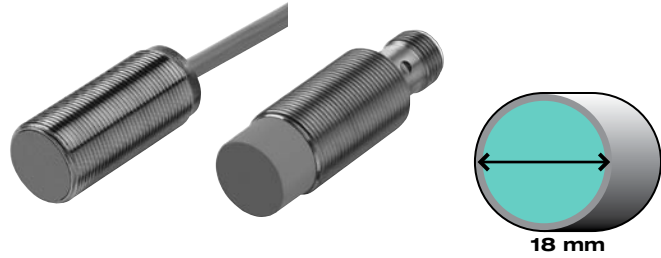


# 2-Wire DC 18 mm Diameter Inductive Sensors

- 5 to 12 mm sensing ranges
- 18 mm threaded barrels
- LED target indication
- Normally open and normally closed models
- Cable and Micro (M12) quick disconnect models



### Technical Specifications

SUPPLY VOLTAGE	NBB/NBN Models	5-60 VDC
	NCB/NCN Models	3.5-30 VDC
LOAD CURRENT (I <sub>L</sub> )		100 mA max.
LEAKAGE CURRENT (OFF-STATE)	NBB/NBN Models	≤ 0.5 mA
	NCB/NCN Models	≤ 0.8 mA
OUTPUT	Suffix Z0, Z3, Z4	Normally open (sinking or sourcing)
	Suffix Z1, Z5	Normally closed (sinking or sourcing)
VOLTAGE DROP AT I <sub>L</sub> (MAX.)	NBB/NBN Models	≤ 5 VDC
	NCB/NCN Models	≤ 3.5 VDC
HYSTERESIS		1-10% (5% typical)
SHORT CIRCUIT AND OVERLOAD PROTECTION		Yes
REVERSE POLARITY PROTECTED		Yes
LED INDICATION		See dimension drawings
SENSING FACE MATERIAL		PBT
STANDARDS		EN 60947-5-2
ENVIRONMENTAL PROTECTION		IP67
AMBIENT TEMPERATURE		-13 °F to +158 °F (-25 °C to +70 °C)
APPROVALS		



See pages 803-854 for cordsets



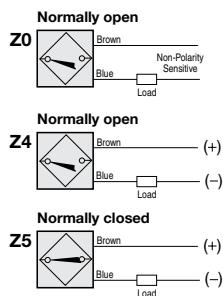
See pages 865-872 for accessories

## Wiring Diagrams

### 2-Wire DC



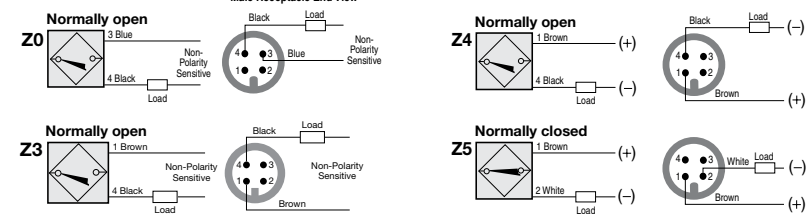
#### Cable Connection



#### Quick Disconnect

Note: Wiring diagrams show quick disconnect pin numbers.

#### V1 Type



### 18 mm Diameter

#### 2-Meter Cable Models

Dia. (mm)	Model Number	Range (mm)	Mounting	Electrical Output	Switching Frequency	Barrel Material*	Cable Jacket/Size	Dwg. No.
18	NBB5-18GM40-Z0	5	Flush	Normally open	500 Hz	Ni-Brass	PVC/#22 AWG	1
	NBN8-18GM40-Z0	8	Nonflush	Normally open	500 Hz	Ni-Brass	PVC/#22 AWG	2
	NCB8-18GM50-Z4	8	Flush	Normally open	1 kHz	SS	PVC/#22 AWG	3
	NCB8-18GM50-Z5	8	Flush	Normally closed	1 kHz	Ni-Brass	PVC/#22 AWG	3
	NCN12-18GM50-Z4	12	Nonflush	Normally open	1 kHz	Ni-Brass	PVC/#22 AWG	4
	NCN12-18GM50-Z5	12	Nonflush	Normally closed	1 kHz	Ni-Brass	PVC/#22 AWG	4



#### Micro (M12) Quick Disconnect Models

Dia. (mm)	Model Number	Range (mm)	Mounting	Electrical Output	Switching Frequency	Barrel Material*	Quick Disconnect	Dwg. No.
18	NBB5-18GM40-Z0-V1	5	Flush	Normally open	500 Hz	Ni-Brass	M12 Micro	5
	NBB5-18GM40-Z3-V1	5	Flush	Normally open	500 Hz	Ni-Brass	M12 Micro	5
	NBN8-18GM40-Z0-V1	8	Nonflush	Normally open	450 Hz	Ni-Brass	M12 Micro	6
	NBN8-18GM40-Z3-V1	8	Nonflush	Normally open	450 Hz	Ni-Brass	M12 Micro	6
	NCB8-18GM50-Z4-V1	8	Flush	Normally open	1 kHz	Ni-Brass	M12 Micro	7
	NCB8-18GM50-Z5-V1	8	Flush	Normally closed	1 kHz	Ni-Brass	M12 Micro	7
	NCN12-18GM50-Z4-V1	12	Nonflush	Normally open	1 kHz	Ni-Brass	M12 Micro	8
	NCN12-18GM50-Z5-V1	12	Nonflush	Normally closed	1 kHz	Ni-Brass	M12 Micro	8



Inductive Cylindrical

2-Wire DC

\*SS = stainless steel, Ni-Brass = nickel-plated brass

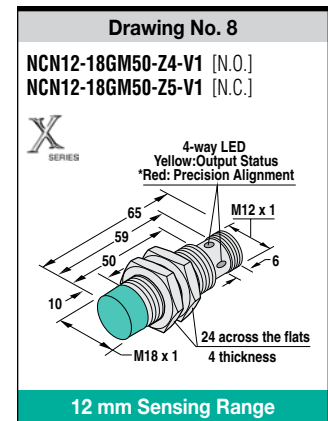
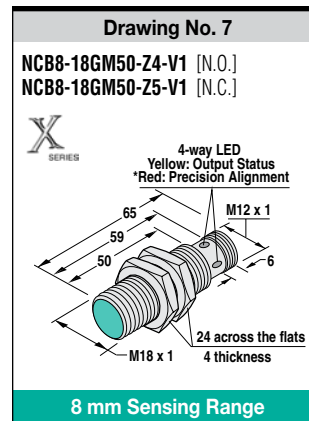
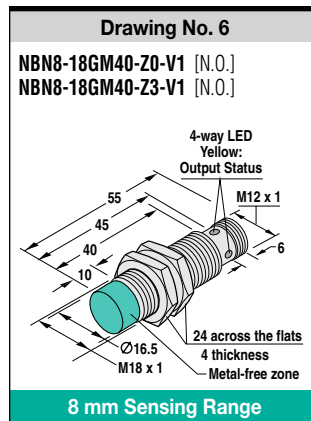
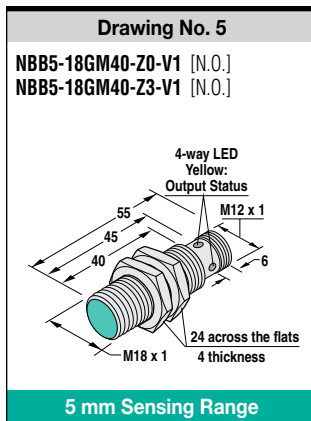
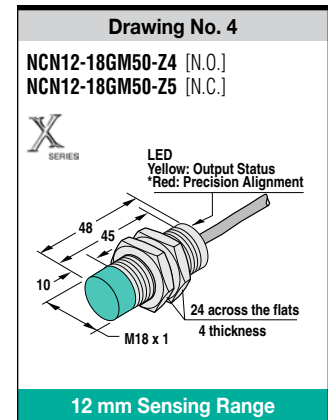
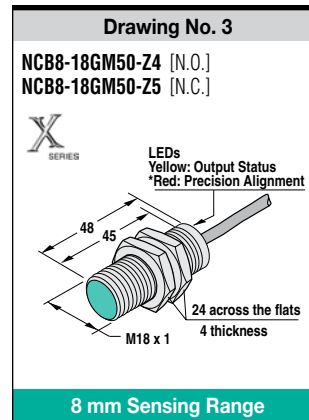
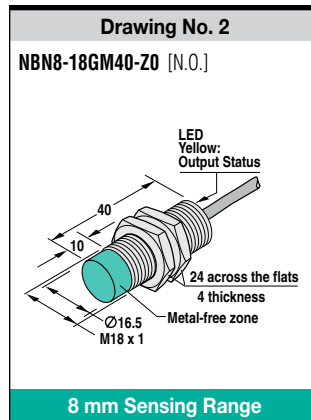
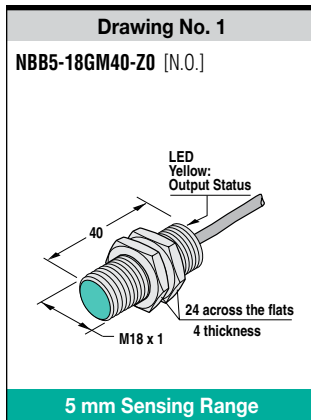
⚡ Stocked item

- Typical delivery 4 weeks or less  
Consult factory for all other models

Look for this logo in the drawings to identify our X-Series extended range sensors



X-Series™  
Sensing range 25-240% beyond "traditional" inductive sensors



\*Illuminates when the target is between 80-100% of the nominal sensing distance.

Subject to modifications without notice

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