


# TURCK Inductive Sensors - Barrels

## G and EG Barrel



## Barrel, Metal with Potted-In Cable - Standard, Stainless Steel Full Threading

2-Wire DC, Requires Remote Amplifier   
5-30 VDC  
Variable Resistance Output, NAMUR (EN 50227)



## Sensor Selection

Part Number	Embeddable	Rated Operating Distance (mm)	Barrel Diameter (mm)	Barrel Material	Drawing #	Wiring Diagram	# of LEDs	Switching Frequency	FM Approved Division 1 *	Time Delay Before Availability (ms)	ID Number
Bi 2-G12-Y0	•	2	12	CPB	1	A	0	5000	•	≤1	T1005400
Bi 2-G12-Y0X	•	2	12	CPB	1	A	1	5000	•	≤1	T4010000
Bi 5-G18-Y0	•	5	18	CPB	3	A	0	1000	•	≤1	T1006000
Bi 5-G18-Y0X	•	5	18	CPB	3	A	1	1000	•	≤1	T4015000
Bi10-G30-Y0	•	10	30	CPB	5	A	0	500	•	≤1	T1006200
Bi10-G30-Y0X	•	10	30	CPB	5	A	1	500	•	≤1	T4020000
Bi20-G47-Y1	•	20	47	CPB	7	A	0	200	•	≤1	M1006800
Bi20-G47-Y1X	•	20	47	CPB	7	A	1	200	•	≤1	M1020200
Ni 5-G12-Y0		5	12	CPB	2	A	0	2000	•	≤1	T1005500
Ni 5-G12-Y0X		5	12	CPB	2	A	1	2000	•	≤1	T4010100
Ni10-G18-Y0		10	18	CPB	4	A	0	500	•	≤1	T1006100
Ni10-G18-Y0X		10	18	CPB	4	A	1	500	•	≤1	T4015100
Ni15-G30-Y0		15	30	CPB	6	A	0	200	•	≤1	T1006300
Ni15-G30-Y0X		15	30	CPB	6	A	1	200	•	≤1	T4020100
Ni25-G47-Y1		25	47	CPB	8	A	0	150	•	≤1	M1006900
Bi 2-EG12-Y0X	•	2	12	SS	1	A	1	5000	•	≤1	T4012000

\* Factory Mutual approval applies only when used with Factory Mutual approved switching amplifiers.

Note: Y0 and Y1 units have identical electrical properties. [See Section A for differences in European approvals.](#)

## Cable/Conductor

Cable: PVC Jacket; 2 meter standard length  
Copper Conductor: G12: 24 AWG  
(PVC insulated) G18/G30/G47: 21 AWG

## Material

Barrel/Locknuts: CPB = Chrome Plated Brass  
SS = Stainless Steel  
Sensing Face: PA 12-GF30 Plastic  
End Cap: G12/G18/G30: PUR Plastic

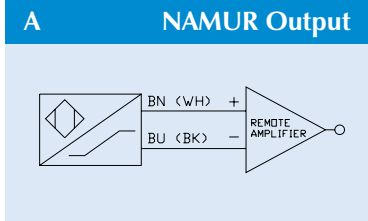
## Accessories

[Accessories and mounting devices can be found in Section J.](#)  
Remote Amplifier required. Consult TURCK *multimodul* or *Automation Controls* catalog.

## Specifications

Differential Travel (Hysteresis)	1-10% (5% typical)
Nominal Voltage	8.2 VDC (EN 50227)
Resistance Change from Nonactivated to Activated Condition	1.0 kΩ to >8.0 kΩ
Resulting Current Change	≥2.2 mA to ≤1.0 mA
Recommended Switching Point for Remote Amplifier	1.55 mA
Power-On Effect	Realized in Amplifier
Reverse Polarity Protection	Incorporated
Wire-Break Protection	Realized in Amplifier
Transient Protection	Realized in Amplifier
Operating Temperature	-25°C to +70°C (-13°F to +158°F)
Enclosure	Meets NEMA 1,3,4,6,13 and IEC IP 67
Shock	30 g, 11 ms
Vibration	55 Hz, 1 mm Amplitude in all 3 Planes
Repeatability	≤2% of Rated Operating Distance
LED On	Output Energized

## Wiring Diagram



Barrels

## Dimensions

