

Inductive Proximity Sensors

3.17mm to 4mm Sensing Range

3-Wire
DC

Inductive

Specifications		3-Wire DC			
SENSING RANGE		3.17mm	4mm	4mm	4mm
SHIELDED		No	Yes	Yes	Yes
MODEL NUMBER(S)		111XK21-Q	—	—	NBB4-12GM50-E0
		—	NBB4-12GM30-E2	NBB4-12GM30-E2-V1	NBB4-12GM50-E2
		—	NBB4-12GM30-E3	NBB4-12GM30-E3-V1	—
OUTPUT:		NPN, sinking	—	—	NPN, sinking
Transistor, Normally Open E0, E, E2		—	PNP, sourcing	PNP, sourcing	PNP, sourcing
Normally Closed E3		—	—	—	—
LOAD CURRENT		20mA max.	150mA max.	150mA max.	150mA max.
LEAKAGE CURRENT		≤10μA	≤10μA	≤10μA	≤10μA
VOLTAGE DROP		≤1VDC	≤3VDC	≤3VDC	≤2VDC
SHORT CIRCUIT AND OVERLOAD PROTECTION		No	Yes	Yes	Yes
REVERSE POLARITY PROTECTION		No	Yes	Yes	Yes
SUPPLY VOLTAGE		6-16VDC	10-30VDC	10-30VDC	10-30VDC
LED(s)		No	Yes (1)	Yes (1) 4-way	Yes (1)
CURRENT CONSUMPTION		≤18mA	≤15mA	≤15mA	≤15mA
REPEATABILITY		≤.01mm	≤.01mm	≤.01mm	≤.01mm
HYSTERESIS		3-15%(5% typical)	3-15%(5% typical)	3-15%(5% typical)	3-15%(5% typical)
SWITCHING FREQUENCY		1kHz	1kHz	1kHz	1kHz
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	IP67
AMBIENT TEMPERATURE		40°F to +212°F	-14°F to +158°F	-14°F to +158°F	-14°F to +158°F
HOUSING MATERIAL		Glass-filled thermoplastic polyester	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
SENSING FACE		Glass-filled thermoplastic polyester	Crastin	Crastin	Crastin
APPROVALS	UL LISTED	No	Yes	Yes	Yes
	SP US	No	Yes	Yes	Yes
	FM	No	Yes	Yes	Yes
ELECTRICAL CONNECTION		Solder type	2-meter cable, PVC covered, 3-conductor, #26AWG	Quick disconnect type V1	2-meter cable, PVC covered, 3-conductor, #26AWG

Dimensions (mm)

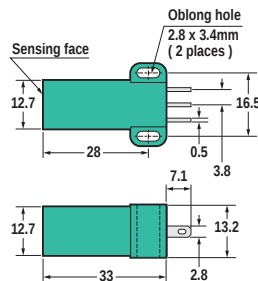
Metal

Crastin or glass-filled thermoplastic polyester

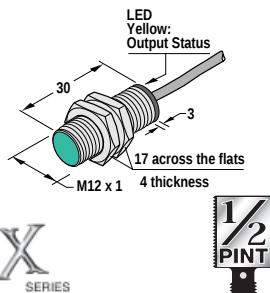
See pages 767-812 for cordsets

For Pile Driver versions see pages 162-177

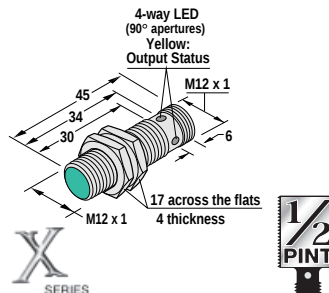
MS Series 111XK21-Q



Basic Series NBB4-12GM30-E2 NBB4-12GM30-E3 (N.C.)



Basic Series NBB4-12GM30-E2-V1 NBB4-12GM30-E3-V1 (N.C.)



Basic Series NBB4-12GM50-E0 NBB4-12GM50-E2

