

Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
30 mm - Nonembeddable, Potted-In Cable 	Ni15-M30-AD4X	T4417200		15	2-Wire DC
	Ni20-M30-AD4X	T4466135	<i>Extended Range</i>	20	
	Ni15-M30-AP6X/S100	M4617200	<i>High Temp. 100°C</i>	15	3-Wire DC NPN
	Ni20-M30-AN6X	T4670516	<i>Extended Range</i>	20	
	Ni20U-EM30-AN6X	M1646320	<i>Uprox</i>	20	
	Ni20U-M30-AN6X	M1646120	<i>Uprox</i>	20	
	Ni20-M30-AP6X	T4670511	<i>Extended Range</i>	20	3-Wire DC PNP
	Ni20U-EM30-AP6X	M1646300	<i>Uprox</i>	20	
	Ni20U-M30-AP6X	M1646100	<i>Uprox</i>	20	
	Ni15-M30-VN4X	T1571500	<i>Comp. Outputs</i>	15	4-Wire DC NPN
	Ni20-M30-VN4X	T4590604	<i>Extended Range</i>	20	
	Ni15-M30-VP4X	T1561500	<i>Comp. Outputs</i>	15	4-Wire DC PNP
Ni20-M30-VP4X	T4590605	<i>Extended Range</i>	20		
30 mm - Nonembeddable, Potted-In Cable 	Ni20-EM30WD-AN6X	M4653434	<i>Washdown</i>	20	3-Wire DC NPN
	Ni20-EM30WD-AP6X	M4653423	<i>Washdown</i>	20	3-Wire DC PNP
30 mm - Nonembeddable, Potted-In Cable 	Ni15-EM30D-VP6X/S120	M4617410	<i>High Temp. 120°C</i>	15	3-Wire DC PNP

Voltage	Switching Freq. (Hz)	Operating Current AC/DC (mA)	Operating Temp. (°C)	Protection	Housing	Face	End Cap	Power LED	Output LED	Cable Length/ Cable Mat.	Wiring Diagram #	Wiring Diagrams
10-65 VDC	200	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1	Diagram 1
	200	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1	
10-30 VDC	500	≤200	-25 to +100	IP 67	CPB	IRPA	EPTR	N/A	YE	2M/PVC	2	Diagram 2
	500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2	
	1500	≤200	-30 to +85	IP 68	SS	PA 12	EPTR	N/A	YE	2M/PVC	2	
	1500	≤200	-30 to +85	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2	
10-30 VDC	500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3	Diagram 3
	1500	≤200	-30 to +85	IP 68	SS	PA 12	EPTR	N/A	YE	2M/PVC	3	
	1500	≤200	-30 to +85	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3	
10-65 VDC	500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	4	Diagram 3
	500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	4	
10-65 VDC	500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	5	Diagram 4
500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	5		
10-30 VDC	1000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	EPTR	N/A	YE	2M/PUR	2	Diagram 4
10-30 VDC	1000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	EPTR	N/A	YE	2M/PUR	3	
10-30 VDC	1000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	EPTR	N/A	YE	2M/PUR	3	Diagram 5
10-30 VDC	1000	≤200	-25 to +120	IP 67	SS	PTFE	PTFE	N/A	YE	2M/PTFE	3	

3-Wire DC

Ripple.	≤10%
Differential Travel (Hysteresis).	3-15% (5% typical)
Voltage Drop Across Conducting Sensor.	≤1.8 V
	- Si...K08/K10(AP71, AN7) . ≤0.7 V
	- Bi/Ni../S34 ≤1.8 V
	- Bi 2-Q8SE-AP/AN.. . . . ≤2.5 V
Trigger Current for Overload Protection	≥220 mA on 200 mA Load Current
	≥170 mA on 150 mA Load Current
	≥120 mA on 100 mA Load Current
Off-State (Leakage) Current	<100 µA
No-Load Current	<10 mA (Uprox ≤15 mA)
Time Delay Before Availability	≤8 ms
Power-On Effect	Per IEC 947-5-2
Reverse Polarity Protection	Incorporated
Wire-Break Protection	Incorporated
Transient Protection.	Per EN 60947-5-2
Shock.	30 g, 11 ms
Vibration	55 Hz, 1 mm Amplitude in all 3 Planes
Repeatability	≤2% of Rated Operating Distance
	Bi 2-Q8SE-AP/AN.. ≤5% of Rated Operating Distance

4-Wire DC

Ripple.	≤10%
Differential Travel (Hysteresis).	3-15% (5% typical)
Voltage Drop Across Conducting Sensor.	≤1.8 V at 200 mA
Trigger Current for Overload Protection	≥220 mA on 200 mA Load Current
	≥170 mA on 150 mA Load Current
	≥120 mA on 100 mA Load Current
Off-State (Leakage) Current	<100 µA
No-Load Current	<10 mA (Uprox ≤15 mA)
Power-On Effect	Per IEC 947-5-2
Reverse Polarity Protection	Incorporated
Wire-Break Protection	Incorporated
Transient Protection.	Per EN 60947-5-2
Shock.	30 g, 11 ms
Vibration	55 Hz, 1 mm Amplitude in all 3 Planes
Repeatability	≤2% of Rated Operating Distance