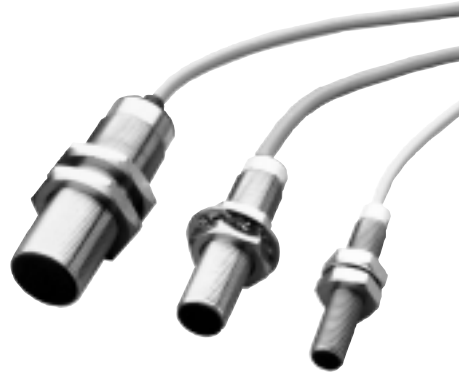


D Series

Inductive Proximity Sensors

Features:

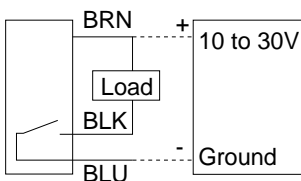
- CE Approved
- Low Cost
- Non Contact Sensing of Any Metal
- No Magnets Needed
- Low Power Consumption
- Shock Resistant



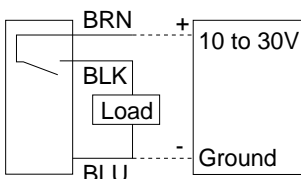
The D Series comes in three sizes, all in the easy flush mount type. Both NPN (sinking) or PNP (sourcing) types are available. They sense any conductive metal surface within range of their sensing coils. They do not require a magnetic target and are perfect for our ratemeters and counters. An LED indicator lights during activation.

	(8mm Diameter)	(12mm Diameter)	(18mm Diameter)
NPN Type (SINK)	#D08N	#D12N	#D18N
PNP Type (SOURCE)	#D08P	#D12P	#D18P
Scanning Principle	Inductive	Inductive	Inductive
Mounting Type	Flush	Flush	Flush
Switch Function	Closer (N.O.)	Closer (N.O.)	Closer (N.O.)
Switch Range; Steel	1mm ± 10% STD	2mm ± 10% STD	5mm + 10% STD
Temperature Range	-25° to +70°C	- 25° to + 70°C	-25° to +70°C
Protection Class	NEMA 4 / IP67	NEMA 4 / IP67	NEMA 4 / IP67
Housing Diameter	M8x1	M12x1	M18x1
Housing Material	Stainless Steel	Chrome Plated Brass	Chrome Plated Brass
Cable	2m, 3 x 0.14mm ²	2m, 3 x 0.14mm ²	2m, 3 x 0.14mm ²
Supply	10-30 VDC	10-30 VDC	10-30 VDC
Feed Current	~8 mA	~8 mA	~8 mA
Switch Current	1mA; Max. drop 0.7 V	1mA; Max. drop 0.7 V	1mA; Max. drop 0.7 V
Switch Current	100 mA; Max. drop 3 V	100 mA; Max. drop 3 V	100 mA; Max. drop 3 V
Frequency	2 kHz	2 kHz	1 kHz
Hysteresis, % of Range	< +15%	< +15%	< ±15%
Function Indicator	LED in Body	LED in Body	LED in Body

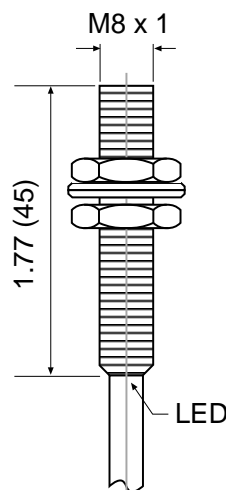
NPN Wiring



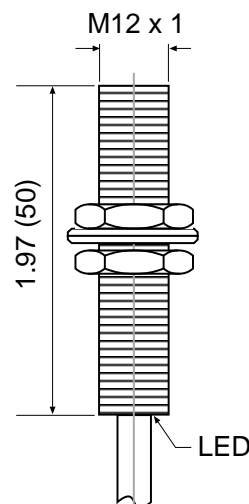
PNP Wiring



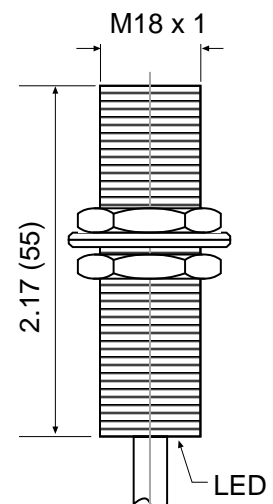
D08



D12



D18



INDUCTIVE PROXIMITY SENSOR for use with KEP Counters and Ratemeters

Applications: Our D Series switches interface easily with our full line of counters and ratemeters. Use PNP switches (D_P) on all KEP units except KAL Series, which requires NPN (D_N) switches.

TYPICAL WIRING

<p>KAL-D</p> <p>CMOS/TTL COMPATIBLE CONTACT CLOSURE JUMPER OR SWITCH MOMENTARY SWITCH</p> <p>1—BLACK-COMMON 2—GREEN-RESET ENABLE 3—YELLOW-EXTERNAL RESET 4—BROWN-SLOW SPEED INPUT 5—BLUE-HIGH SPEED INPUT</p> <p>115 VAC → 115-12 POWER SUPPLY</p> <p>BLK BLU BRN</p> <p>D12N (NPN)</p>	<p>Minicount (MC or MC2)</p> <p>RELAYS A B</p> <p>□ 1 COMMON □ 2 N.O. (N.C./NPN) □ 3 COMMON □ 4 N.O. (N.C./NPN) □ 5 A INPUT □ 6 B INPUT □ 7 12 V OUTPUT/+ DC INPUT □ 8 - DC (GROUND) □ 9 RESET INPUT □ 10 NOT USED □ 11 AC INPUT □ 12 AC INPUT</p> <p>POWER COUNT GROUND</p> <p>D12P</p>														
<p>Minirate (MR2 or MR)</p> <p>RATE INPUT 12 VOLT OUT SIGNAL GROUND</p> <p>1 2 3 4 5 6 7 8 9 10 11 12</p> <p>BRN + BLU - BLK A</p> <p>Just sense the keyway - No gears Required!</p> <p>D12P (PNP)</p>	<p>KALtrol (KAT1)</p> <p>□ 1 AC Main □ 2 AC Main Neutral □ 3 + 12 DC / 8-30 VDC in □ 4 Relay Common □ 5 Relay N.C. □ 6 Relay N.O. □ 7 AC/DC Reset □ 8 AC/DC Count □ 9 AC/DC Common □ 10 Keypad Disable □ 11 *High Speed Count Input □ 12 0V / DC Ground</p> <p>BRN BLK BLU</p> <p>D12P</p> <p>*Select PNP (SW1 OFF)</p>														
<p>KAL-DR/T</p> <p>1—BLACK-COMMON 2—GREEN-SLOW SPEED INPUT 3—YELLOW-PERIODIC MODE SELECT 4—BROWN-HIGH SPEED INPUT</p> <p>115 VAC → 115-12 POWER</p> <p>BLK BLU</p> <p>D12N (NPN)</p>	<p>How To Order:</p> <table border="1"> <thead> <tr> <th>TYPE</th> <th>SIZE</th> </tr> </thead> <tbody> <tr> <td>NPN Type</td> <td>D08N</td> </tr> <tr> <td>(sink)</td> <td>D12N</td> </tr> <tr> <td></td> <td>D18N</td> </tr> <tr> <td>PNP Type</td> <td>D08P</td> </tr> <tr> <td>(source)</td> <td>D12P</td> </tr> <tr> <td></td> <td>D18P</td> </tr> </tbody> </table>	TYPE	SIZE	NPN Type	D08N	(sink)	D12N		D18N	PNP Type	D08P	(source)	D12P		D18P
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