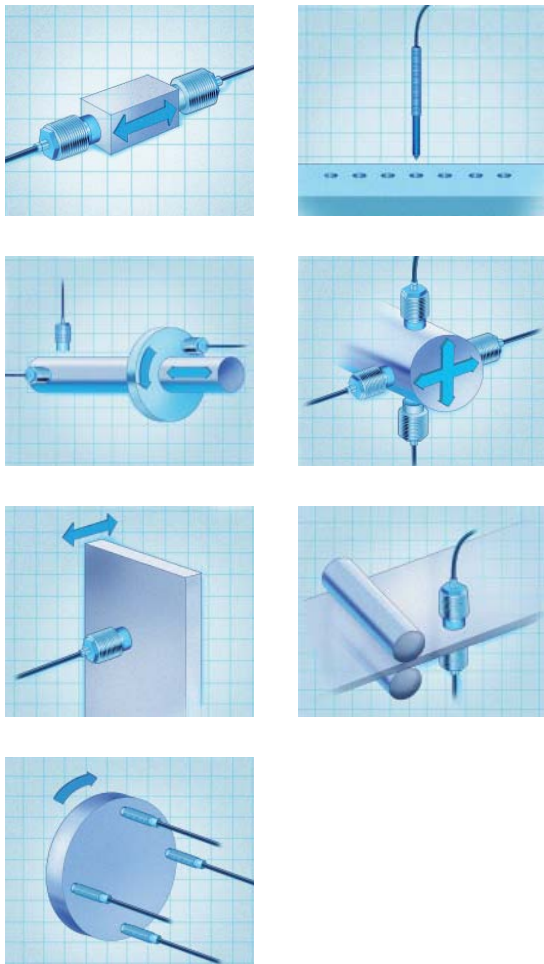


# EDDIE CURRENT SENSORS

## FOR NON-CONTACT POSITION SENSING

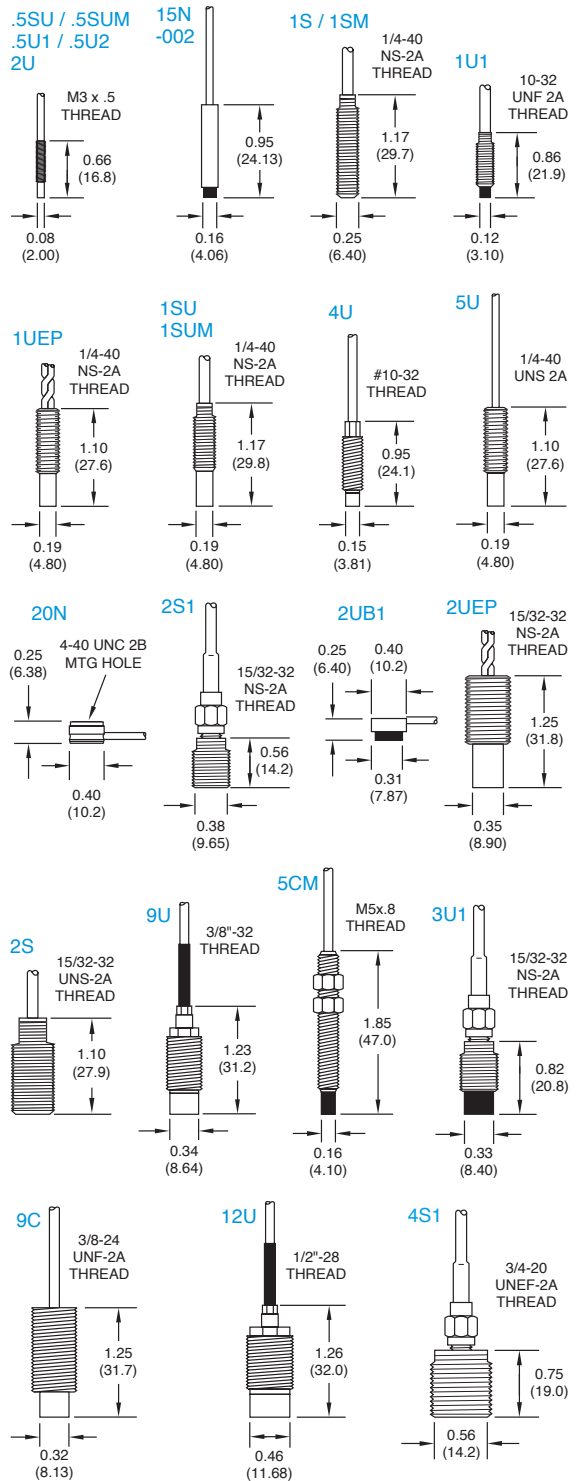
### FEATURES

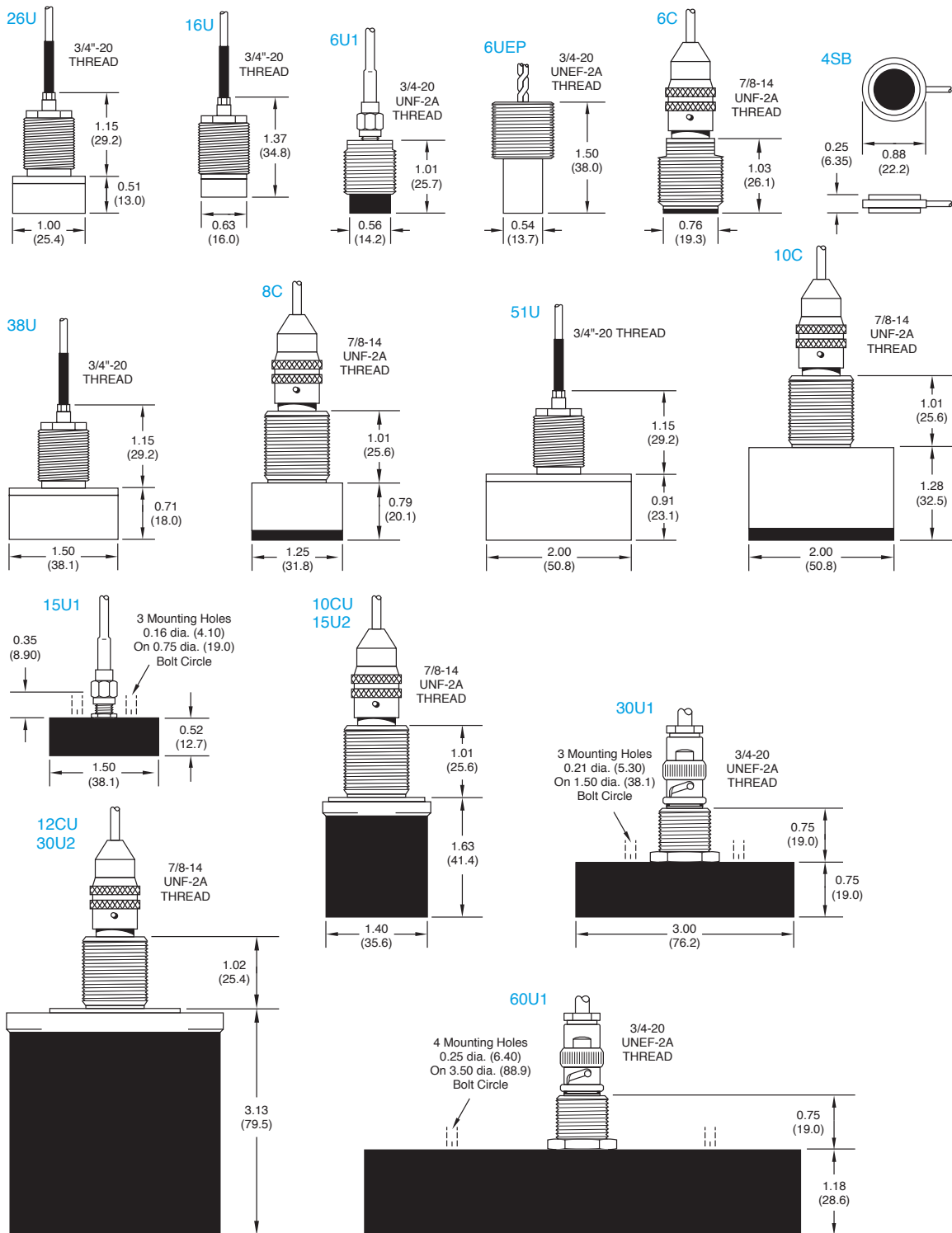
- › Ranges from 0.5 to 60 mm
- › High speed analog and digital signal conditioning
- › Rugged stainless steel and PEEK housings
- › Dual coil and matched differential pairs minimize temperature, radiation and other environmental effects
- › Sensors and cables rated to +400 °F (+204 °C)



### SENSORS

Note: All dimensions shown in inches (mm)





## SPECIFICATIONS

### TYPICAL SENSOR SPECIFICATIONS

### ELECTRONICS

SENSOR	STANDARD RANGE		TARGET MATERIAL		STATIC RESOLUTION		TEMPERATURE RANGE	KD-2306	KD-2446	KD-5100	DIT-5200	SERIES 8000	SMT-9700
	mil	mm	non-mag	magnetic	μ in	μ m							
.5SU, .5U1	20	0.5	✓		4	0.1	1	✓				✓	
.5SUM, .5U2	20	0.5		✓	4	0.1	1	✓				✓	
2U	20	0.5	✓				1		✓				✓
15N	35	0.9	✓				1			✓	✓		✓
1S	40	1.0	✓		4	0.1	1	✓					
1SM	40	1.0		✓	4	0.1	1	✓					
1U1	40	1.0	✓		4	0.1	1	✓				✓	✓
1UEP	40	1.0		✓	4	0.1	2	✓				✓	
1SU	50	1.3	✓		5	0.12	1	✓					
1SUM	50	1.3		✓	5	0.12	1	✓					
4U	50	1.3	✓				2						✓
5U	50	1.3	✓				1						✓
20N	75	1.9	✓				1			✓	✓		✓
2S1	80	2.0	✓	✓	8	0.2	1	✓				✓	
2UB1	80	2.0	✓	✓	8	0.2	1	✓				✓	
2UEP	80	2.0	✓	✓	8	0.2	2	✓				✓	
2S	100	2.5	✓	✓	10	0.25	1	✓					
9U	100	2.5	✓				2						✓
5CM	115	2.9	✓	✓	10	0.25	2		✓				
3U1	120	3.0	✓		12	0.3	1	✓				✓	✓
9C	150	3.8	✓	✓			2		✓				
12U	160	4.0	✓	✓			2		✓				✓
4S1	160	4.0	✓	✓	16	0.4	1	✓				✓	
4SB	160	4.0	✓	✓	16	0.4	1	✓				✓	
16U	200	5.0	✓	✓			2		✓				✓
6U1	240	6.0	✓	✓	24	0.6	1	✓				✓	✓
6UEP	240	6.0	✓	✓	24	0.6	2	✓				✓	
6C	250	6.4	✓	✓	25	0.62	1	✓					
26U	320	8.1	✓	✓			2		✓				✓
38U	500	12.7	✓	✓			2		✓				✓
8C	500	12.7	✓	✓	50	1.25	1	✓					
15U1	600	15.0	✓	✓	60	1.5	1	✓				✓	✓
15U2	600	15.0	✓	✓	60	1.5	1					✓	
51U	600	15.0	✓	✓			2		✓				✓
10C	750	19.1	✓	✓	75	1.9	1	✓					
10CU	1000	25.4	✓	✓	100	2.5	1	✓					
30U1	1200	30.0	✓	✓	120	3.0	1					✓	✓
30U2	1200	30.0	✓	✓	120	3.0	1					✓	
12CU	2000	50.8	✓	✓	200	5.0	1	✓				✓	
60U1	2400	60.0	✓	✓	240	6.0	1	✓				✓	✓

Notes: Operating temperature  
 Range 1: -67 ... +220 °F (-55 ... +105 °C)  
 Range 2: -452 ... +400 °F (-269 ... +204 °C)

Resolution is dependant upon electronics selected. Contact us where value is not shown.

Most sensor ranges may be extended up to 50 %, but performance will vary.

Dynamic resolution = static resolution x square root of bandwidth.

## ELECTRONICS

### KD - 2306

- › Economical single-channel units .
- › Long-term stability and repeatability.
- › Linearity better than  $\pm 0.50\%$  most sensors.
- › Frequency response to 50 kHz.



### DIT - 5200

- › Commercial version of KD-5100 with similar performance.



### KD - 5100

- › Two precisely matched sensors per channel give resolution to a nanometer.
- › Superior thermal and long-term stability of  $5 \times 10^{-6}$  inches/month or better.
- › Small package size: just 2 x 2.12 x 0.75 inches.
- › Cryogenic sensors available.
- › High sensitivity up to 10 V/mil (394 mV/ $\mu\text{m}$ ).
- › Low power consumption less than 2W @  $\pm 15$  Vdc typical.
- › Frequency response to 22 kHz.



### KDM - 8200

- › A modularized rack format for customized, building-block solutions.
- › Standard 3U 7T Eurocaramodules.
- › Multiple channels, rack mounted or bench-top enclosures.
- › Frequency response to 50 kHz.
- › Dual channel NEMA enclosure available.
- › Linearity  $\pm 0.50\%$ .



### SMT - 9700

- › Flexible, high-resolution position/displacement sensing for OEM apps.
- › 1, 2 or 3 channels
- › Nanometer to sub-nanometer resolution
- › Easy, cost-effective performance customization
- › CE and RoHS compliant
- › Small package size
- › 13 standard sensor options



### KD - 2446

- › Static resolution to 12  $\mu\text{inches}$ .
- › Easy to calibrate; low cost
- › Excellent performance with highly resistive targets.
- › Compact rugged electronics and sensors.
- › Analog and switched output.
- › Frequency response to 10 kHz.



Our policy is to improve specification of our products continuously, so technical and production details can be changed without any notice.