

# BEI DUNCAN Sensors

## MODEL 9600 MINIATURE SPRING RETURN LINEAR MOTION POSITION SENSORS

### Specifications:

- Terminal Length: 7.1 mm
- Actuation Force: 4.0 Newton's Maximum
- Linearity over Active Electrical Travel: ±2%
- Mechanical Life: 2,000,000 Full Cycles, 5,000,000 Dither Cycles

### Features:

- Plastic housing and shaft
- Plated brass eyelet style terminals
- 4.8mm diameter shaft

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.		Active Elec. Travel	Mechanical Elec. Travel	Res. 20%	Dimensions (mm)			Price Each		
Mfr.	Mfr. Part No.				C	D	E	F	1	5
682	9605R1.7KL2.0	10 mm	14.2 mm	1.7K	26.90	7.6	5.1	20.6		
682	9610R3.4KL2.0	22.8 mm	26.9 mm	3.4K	39.60	12.7	12.7	33.3		
682	9615R5.1KL2.0	35.6 mm	39.6 mm	5.1K	52.30	20.3	17.8	46.0		

## MODEL 600 LINEAR MOTION POSITION SENSORS

### Specifications:

- Power Rating at 70°C: 0.25 Watts
- Output Smoothness: 0.1%
- Resolution: Infinite
- Dielectric Strength: 500 VDC

- Actuation Force: 2 oz. (0.56 Newtons) max.
- Repeatability: Within 0.0005 in. (0.013)
- Mechanical Life: 10,000,000 Cycles
- Temperature Range: -55°C to +125°C

Supplied with #28 AWG Teflon insulated wire 12 inches in length.

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.		Active Elec. Travel	Mechanical Elec. Travel	Res. 20%	(A) Case Dim.	Price Each		
Mfr.	Mfr. Part No.					1	5	10
682	601R1KL.7	23 mm	28 mm	1K	57 mm			
682	602R2KL.35	48 mm	53 mm	2K	89 mm			
682	603R3KL.25	74 mm	79 mm	3K	114 mm			
682	604R4KL.15	99 mm	104 mm	4K	140 mm			
682	606R6KL.12	150 mm	155 mm	6K	190 mm			
682	610R10KL.09	251 mm	257 mm	10K	292 mm			
682	612R12KL.08	302 mm	307 mm	12K	343 mm			

## MODEL 9800 THROTTLE POSITION AND INDUSTRIAL CONTROL SENSORS

### Specifications:

- Power Rating at 70°C: 0.15 Watts
- Linearity over Active Electrical Rotation: ±2%
- Mechanical Life: 1,000,000 Full Cycles, 5,000,000 Dither Cycles

### Features:

- High temperature plastic housing
- Sealed for harsh environments
- Spring return

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.		Active Elec. Rotation	Mech. Rotation	Res. 20%	Rotation Direction	Output	No. of Pins	Price Each		
Mfr.	Mfr. Part No.							1	5	10
682	9805R5KL2.0	85	120	5K	CW	Single	3			
682	9806R5KL2.0	85	120	5K	CCW	Single	3			
682	9811R5KL2.0	85	120	5K	CW	Single	3			
682	9812R5KL2.0	85	120	5K	CCW	Single	3			

## MODEL 9850 9860 SINGLE AND DUAL OUTPUT-LOW-PROFILE-PRECISION ROTARY SENSOR MODULES

### Specifications:

- Power Rating at 70°C: 0.15 Watts
- Linearity over Active Electrical Rotation: ±2%
- Mechanical Life: 1,000,000 Full Cycles, 5,000,000 Dither Cycles

### Features:

- High temperature plastic housing
- Sealed for harsh environments
- Spring return

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.		Active Elec. Rotation	Mech. Rotation	Res. 20%	Rotation Direction	Output	No. of Pins	Price Each		
Mfr.	Mfr. Part No.							1	5	10
682	9851R5KL2.0	85	120	5K	CW	Single	3			
682	9852R5KL2.0	85	120	5K	CCW	Single	3			
682	9855R5KL2.0	130	180	5K	CW	Single	3			
682	9856R5KL2.0	130	180	5K	CCW	Single	3			
682	9861R5KL2.0	85	120	5K	CW	Dual	6			
682	9862R5KL2.0	85	120	5K	CCW	Dual	6			

## MODEL 9900 DUAL OUTPUT HALL EFFECT SENSORS

### Specifications:

- Resolution: Analog (continuous)
- Temperature Range: -40°C to +85°C
- Rotational Life: 10 Million

### Features:

- Rotating magnet / fixed sensor configuration provides improved accuracy and reliability
- Two independent outputs for redundancy
- Fully programmable outputs; programmable offset, gain, slope, and temperature compensation

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.		Active Elec. Rotation	Mech. Rotation	Rotation Direction	Output	No. of Pins	Price Each		
Mfr.	Mfr. Part No.						1	5	10
682	9902090CW	90	180	CW	Dual	6			

## HARNESS ASSEMBLIES

Assemblies for models 9900 (6pin) and 9850 (3 and 6 pin).

### Specifications:

- Overall length is 12"
- Lead length is 11" ±.5"

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.		Description	Lead Length	No. of Pins	Price Each		
Mfr.	Mfr. Part No.				1	5	10
682	1-172	Harness Assembly	11"	3			
682	1-173	Harness Assembly	11"	6			

**DIMENSIONS: mm**

**Model 9600**

7.1, 9.0, 7.9, 5.0, 7.9, 12.7, 3.6, 1.9, 1.9 Typ., 3.6 Typ., C-2.8, F, Fully extended, Housing length, Electrical travel, Mechanical travel, Spherical radius, 2.8 Typ., 7.2

**Model 600**

20, 10, 9, 38, 15 Typ., 50, #28 AWG Teflon insulated 305mm min. length, B, Extended ø4.76, A, 25, Retracted, 10-32 UNF 2A thread

**Models 9805/9806**

40°±5°, 7.50, 2.4, +0.1, -0.0, 9.5 Dia. x13.7 deep

**Model 9850 Single Output**

52.7, 7.5, 35.7, 25.9, 16.2, 15.2, 3.0, Mounting Surface, 2x ø5.0, Shown at CW stop

**Models 9811/9812**

22, 13, 25.4, 17, +0.0, -0.1, 2.2, 23, 33, 3

**Model 9860 Dual Output**

52.7, 35.8, 7.5, 25.1, 16.2, 15.0, 3.0, Mounting Surface, 2x 5.0 Wide Slot, ø9.6, 2.5, 16.5, 38.0, Shown at CW stop

**Model 9900**

7.50, 40°±5°, 2.4, +0.1, -0.0, 9.5x13.7 deep, 2x ø4.4, 90°, 50.7, 14.9, 4.60, +0.0, -0.05, 32.0, 41.1, Mounting Surface, 25.8, 12.9, 15.3, 6.6, +0.0, -0.2, ø6.00, +0.00, -0.13, 9.2, 3.70

orange, red, brown, 11"

Sold as Assembly

blue, green, yellow, orange, red, brown, 11"

Sold as Assembly