

# SIZE SR12

## ABSOLUTE SHAFT ENCODER 8 BITS, 9 BITS & 10 BITS

Starting at \$330.00–8bits, \$340.00–9 bits,  
\$390.00–10 bits  
Binary, Gray code & Analog outputs



### FEATURES



brand, Made in USA

- Size 12 dia, 1/4" Shaft Single-turn
- 256 (8 bits), 512 (9 bits), 1024 (10 bits) Resolution
- Natural Binary, Parallel 5v outputs  
Analog 0-10v outputs, 12-30v input
- Std. 3 ft. cable w/2x6 header conn. (Parallel outputs)
- 3 pos. terminal block for Analog outputs

### SPECIFICATIONS

#### Electrical

Pulse per Revolution	256 (8-bits), 512 (9-bits), 1024 (10-bits)
Supply Voltage	5vdc (Binary, Gray, 12-30vdc (Analog))
Current	25ma Max. (No Load)
Operating Temp.	0° to 70°C
Interrogation Rate	1 KHZ
Accuracy	Plus Minus 2/3 bit digital, 1 bit analog
Rotation	CW-increase as viewed from the shaft end.
Digital Output Logic Level	Logic "0": Low voltage, 0.6 Max Logic "1": High voltage, Supply 0.7v Min.
Data Ready Outputs	Normally high, goes low momentarily 7 sec. while the outputs are changing. Stays low to indicate error.
Analog Output Levels	Zero code error: 20mv, Full-scale error: 125mv. Relative accuracy: plus minus 20mv
Output Circuits	Totem-pole 5ma. max source and 6ma. max sink current
Analog 0-10 vdc	Potentiometer is hooked up to 10v & Grd. The output looks like a sawtooth wave where the output voltage increases from 0 to 10v for each complete rev. and then immediately drops to 0v as a new rev. is started.

### Mechanical & Environmental

Max. Speed	5,000 rpm
Bearings	Shielded ball bearings
Shaft loading	10 lbs. Axial, 10 lbs. Radial
Weight	2 oz
Materials	Case: Anodized Aluminum Shaft: 303 Stainless Steel
Humidity	35-85% w/o condensation
Vibration	Max 10g (58 to 500Hz)
Shock	50g (11ms duration)
Enclosure	IP-54/NEMA 12

### Wiring Diagram

#### Digital Parallel (8, 9-bits)

PIN #	Function
1	Supply
2	2 <sup>3</sup>
3	2 <sup>2</sup>
4	2 <sup>1</sup>
5	2 <sup>0</sup>
6	Data Ready
7	2 <sup>8</sup>
8	2 <sup>7</sup>
9	2 <sup>6</sup>
10	2 <sup>5</sup>
11	2 <sup>4</sup>
12	Common

#### Digital Pararell (10-bits)

PIN#	FUNCTION
1	Reserved
2	Reserved
3	Supply
4	2 <sup>3</sup>
5	2 <sup>2</sup>
6	2 <sup>1</sup>
7	2 <sup>0</sup>
8	Data Ready
9	2 <sup>8</sup>
10	2 <sup>7</sup>
11	2 <sup>6</sup>
12	2 <sup>5</sup>
13	2 <sup>4</sup>
14	Common
15	2 <sup>9</sup>
16	Reserved

### Analog

Terminal	Function
—	Common
~	0-10vdc output
+	12-30vdc supply

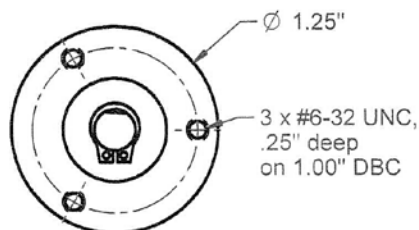
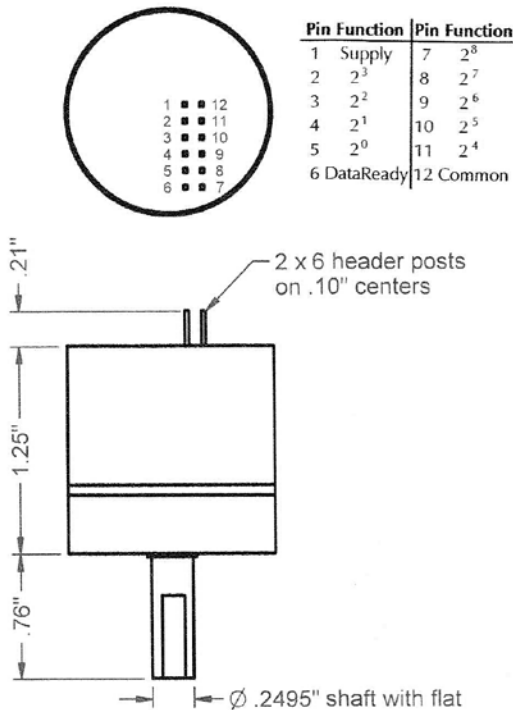
Note: Analog outputs has no cable.

# SIZE SR12

## ABSOLUTE SHAFT ENCODER 8 BITS, 9 BITS & 10 BITS

MODEL NUMBER	SPECIFICATION	CABLE	S.R.P.
SR12-256N/5	8 bits Natural Binary, Parallel 5v outputs	3ft. Ribbon Cable	\$330.00
SR12-512N/5	9 bits Natural Binary, Parallel 5v outputs		\$340.00
SR12-1024N/5	10 bits Natural Binary, Parallel 5v outputs		\$390.00
SR12-256G/5	8 bits Gray code, Parallel 5v outputs		\$330.00
SR12-512G/5	9 bits Gray code, Parallel 5v outputs		\$340.00
SR12-1024G/5	10 bits Gray code, Parallel 5v outputs		\$390.00
SR12-256A/12-30	8 bits Analog 0-10v outputs,12-30v input	N/A	\$330.00
SR12-512A/12-30	9 bits Analog 0-10v outputs,12-30v input	N/A	\$340.00
SR12-1024A/12-30	10 bits Analog 0-10v outputs,12-30v input	N/A	\$390.00

SR12 with parallel outputs



SR12 with analog output

