Spherosyn 2G and Microsyn 2G Linear Encoders

## **POSITION SENSORS & ENCODERS**

Designed to work exclusively with Sensata | Newall's Digital Readouts, the Spherosyn 2G and Microsyn 2G encoders embody a truly innovative design in which all of the electronics and measuring components are sealed and protected. Unlike other encoder technologies, Sensata | Newall encoders carry an IP67 environmental rating and will continue to provide accurate, reliable readings even when fully submersed in water, oil or coolant. No other linear encoder matches the durability and reliability of Sensata's Newall brand.

## Specifications:

|               | Spherosyn 2G                  |                                |
|---------------|-------------------------------|--------------------------------|
| Travel length | Up to 13.5 meters             | Up to 1 meter                  |
| Accuracy      | +/-10 µm per any one meter of | +/- 5 μm or +/- 10 μm          |
|               | travel                        |                                |
| Resolution    | +/- 10 μm or 5 μm (0.0005" or | 10 μm, 5 μm, or 1 μm (0.0005", |
|               | 0.0002")                      | 0.0002", 0.0001", 0.00005")    |
| Repeatability | Within one resolution count   |                                |

## Mechanical:

| Mechanical Specifications | Spherosyn 2G               | Microsyn 2G                  |
|---------------------------|----------------------------|------------------------------|
| Scale travels             | 52 mm - 13,500 mm          | 50 mm - 1000 mm              |
|                           | Call for travels > 13.5 m  |                              |
| Scale diameter / material | 15.25 mm / stainless steel | 6.5 mm / carbon fiber        |
| Reader head dimensions    | 52 mm x 141 mm x 28 mm     | 35 mm x 75 mm x 18 mm        |
| Overall scale length      | Travel length + 254 mm     | Travel length + 178 mm       |
| Output cable length       | 2.5 meters stainless steel | (extension cables available) |
|                           | armor                      |                              |

## **Features**

- IP67 environmental rating. Fully submersible
- Withstands dust, dirt, oil and other harsh environmental conditions
- No mechanical wear characteristics
- No more broken or scratched glass
- Requires no cleaning or regular maintenance
- High tolerance to shock and vibration
- Easy to install no backer bar or machined surface required

