

**UCD-S101G-2012-G10G-2RW**



## Outputs

## Electrical Data

## Data Sheet

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|                     |                   |
|---------------------|-------------------|
| EMC: Noise Immunity | DIN EN 61000-6-2  |
| MTTF                | 350 years @ 40 °C |

### Sensor

|                        |                                                           |
|------------------------|-----------------------------------------------------------|
| Technology             | Magnetic                                                  |
| Resolution Singleturn  | 12 bit                                                    |
| Resolution Multiturn   | 20 bit                                                    |
| Multiturn Technology   | Self powered magnetic pulse counter (no battery, no gear) |
| Accuracy (INL)         | $\pm 0.0878^\circ (\leq 12 \text{ bit})$                  |
| Sense Signal (Default) | Clockwise shaft movement (front view on shaft)            |
| Code                   | Gray                                                      |

### Environmental Specifications

|                            |                                                                    |
|----------------------------|--------------------------------------------------------------------|
| Protection Class (Shaft)   | IP68/IP69K                                                         |
| Protection Class (Housing) | IP68/IP69K                                                         |
| Operating Temperature      | -40 °C fixed (-40 °F), -30 °C flexible (-22 °F) - +80 °C (+176 °F) |
| Humidity                   | 98% RH, no condensation                                            |

### Mechanical Data

|                                                                      |                                                              |
|----------------------------------------------------------------------|--------------------------------------------------------------|
| Housing Material                                                     | Stainless Steel V4A (1.4404, 316 L)                          |
| Housing Coating                                                      | No Coating                                                   |
| Flange Type                                                          | Synchro, $\varnothing$ 42 mm Heavy Duty                      |
| Flange Material                                                      | Stainless steel V4A (1.4404, 316 L)                          |
| Shaft Type                                                           | Solid, Length = 20 mm                                        |
| Shaft Diameter                                                       | $\varnothing$ 10 mm (0.39")                                  |
| Shaft Material                                                       | Stainless Steel V4A (1.4112, 440 B), hardened                |
| Max. Shaft Load                                                      | Axial 300 N, Radial 300 N                                    |
| Minimum Mechanical Lifetime (10 <sup>8</sup> revolutions with Fa/Fr) | 7.6 (300N / 300 N), 10 (270 N / 270 N), 200 (100 N / 100 N)  |
| Friction Torque                                                      | $\leq 3 \text{ Ncm @ } 20^\circ\text{C}$ (4.2 oz-in @ 68 °F) |
| Max. Permissible Mechanical Speed                                    | $\leq 6000 \text{ 1/min}$                                    |
| Shock Resistance                                                     | $\leq 200 \text{ g}$ (half sine 11 ms, EN 60068-2-27)        |
| Permanent Shock Resistance                                           | $\leq 30 \text{ g}$ (half sine 16 ms, EN 60068-2-29)         |
| Vibration Resistance                                                 | $\leq 30 \text{ g}$ (10 Hz - 1000 Hz, EN 60068-2-6)          |
| Length                                                               | 69 mm (2.72")                                                |
| Weight                                                               | 560 g (1.23 lb)                                              |

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### Electrical Connection

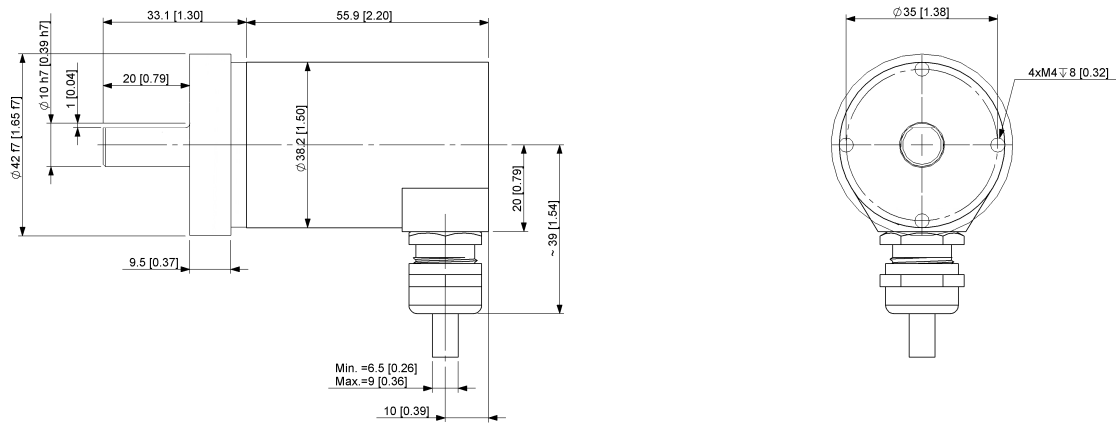
|                        |                                        |
|------------------------|----------------------------------------|
| Connection Orientation | Radial                                 |
| Cable Length           | 2 m [79"]                              |
| Wire Cross Section     | 0.34 mm <sup>2</sup> / AWG 22          |
| Material / Type        | PUR / PU                               |
| Cable Diameter         | 7.5 mm (0.30 in)                       |
| Minimum Bend Radius    | 56 mm (2.2") fixed, 75 mm (3") flexing |

### Certification

|                    |                                                 |
|--------------------|-------------------------------------------------|
| Approval           | CE + cULus listed, Industrial Control Equipment |
| Product Life Cycle | Established                                     |

### Connection Plan

|              |             |
|--------------|-------------|
| SIGNAL       | CABLE COLOR |
| Power Supply | Brown       |
| GND          | White       |
| Data+        | Gray        |
| Data-        | Pink        |
| Clock+       | Green       |
| Clock-       | Yellow      |
| Preset       | Blue        |
| DIR          | Red         |
| Shielding    | Shield      |



### [2D Drawing](#)

### Accessories

Coupling Disc Type-10-12  
 Coupling Bellow Type-10-10  
 Coupling Bellow Type-06-10  
 Coupling Bellow Type-08-10  
 Coupling Bellow Type-10-12  
 Coupling Bellow Type-10-(1/4")  
 Coupling Bellow Type-10-(3/8")  
 Coupling Jaw Type-06-10  
 Coupling Jaw Type-08-10  
 Coupling Jaw Type-10-12  
 Coupling Jaw Type-10-(1/4")  
 Coupling Jaw Type-10-(3/8")  
 Coupling Jaw Type-10-10  
 Coupling Disc Type-06-10  
 Coupling Disc Type-10-10

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More

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The picture and drawing are for general presentation purposes only. Please refer to the "Download" section for detailed technical drawings. All dimension in [inch] mm. © FRABA B.V., All rights reserved. We do not assume responsibility for technical inaccuracies or omissions. Specifications are subject to change without notice.