

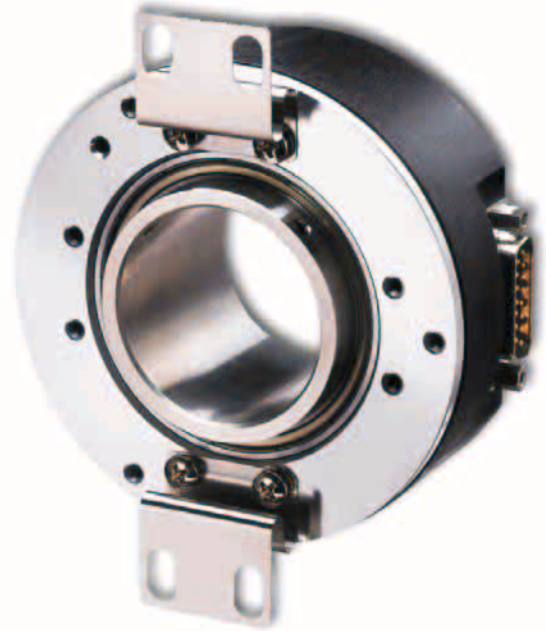
# SERIES RI80E

**Hengstler™ brand**

## Hollowshaft Encoder

### Key Features

- Advanced Opto-ASIC Provides Fault Detection
- Oversized Bearings for Long Life
- Unbreakable Code Disc
- Specifically Designed for Elevator Geared Traction Drives



## SPECIFICATIONS

### MECHANICAL

**Shaft fixation:** Keyway, set screw  
**Coupling:** Spring tether (single, double)  
**Protection:** IP50, IP64  
**Max. Speed:** 3600 min<sup>-1</sup> (IP50); 1500 min<sup>-1</sup> (IP64)  
**Moment of inertia:** 240 kgmm<sup>2</sup>  
**Max. parallel shaft misalignment:**  
 Axial: ± 0.5 mm  
 Radial: ± 0.05 mm  
**Operating temperature:** -20 ... +70 °C  
**Storage temperature:** -40 ... +70 °C  
**Housing Material:** Glass fiber-reinforced plastic/ aluminum  
**Weight:** 1000 g

### ELECTRICAL

**General design:** As per DIN EN 61010, protection class III, Contamination level 2, over voltage class II  
**Supply voltage:** DC 5V ±10% or DC 5-30V<sup>1</sup>  
**Max. current:** w/o load max 60mA (DC 5V), 60mA (DC 10V), 35mA (DC 24V)  
**Standard output versions:**  
 With RS 422 (R): A, B, N,  $\bar{A}$ ,  $\bar{B}$ ,  $\bar{N}$ , Alarm, Sense  
 With push-pull (K): A, B, N, Alarm  
 With push-pull (I): A, B, N,  $\bar{A}$ ,  $\bar{B}$ ,  $\bar{N}$ , Alarm, Sense  
**Connection:** Sub-D 15-pole, cable radial

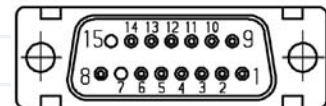
<sup>1</sup> Pole protection with supply voltage DC 5 ... 30 V

### ELECTRICAL CONNECTIONS

Pin	Signal 15 pole	Signal 9 pole
1	$\bar{B}$	GND
2	B	+Ub
3	$\bar{A}$	A
4	A	B
5	GND	N
6	+Ub	$\bar{A}$
7	n.c.	$\bar{B}$
8	screen	$\bar{N}$
9	$\bar{N}$	
10	N	
11	n.c.	
12	n.c.	
13	n.c.	
14	n.c.	
15	n.c.	

Color	RS 422 + Alarm + Sense (R)	Push-pull (K)	Push-pull Complement. (I)
brown	Channel A	Channel A	Channel A
green	Channel $\bar{A}$ Channel		$\bar{A}$
grey	Channel B	Channel B	Channel B
pink	Channel $\bar{B}$ Channel		$\bar{B}$
red	Channel N	Channel N	Channel N
black	Channel $\bar{N}$ Channel		$\bar{N}$
violet	Alarm	Alarm	Alarm
white	Sense GND		Sense GND
blue	Sense V <sub>CC</sub>		Sense V <sub>CC</sub>
brown/green	DC 5 - 30 V	DC 5 - 30 V	DC 5 - 30 V
white/green	GND	GND	GND
screen <sup>1</sup>	screen <sup>1</sup>	screen <sup>1</sup>	screen <sup>1</sup>

<sup>1</sup> connected with encoder housing



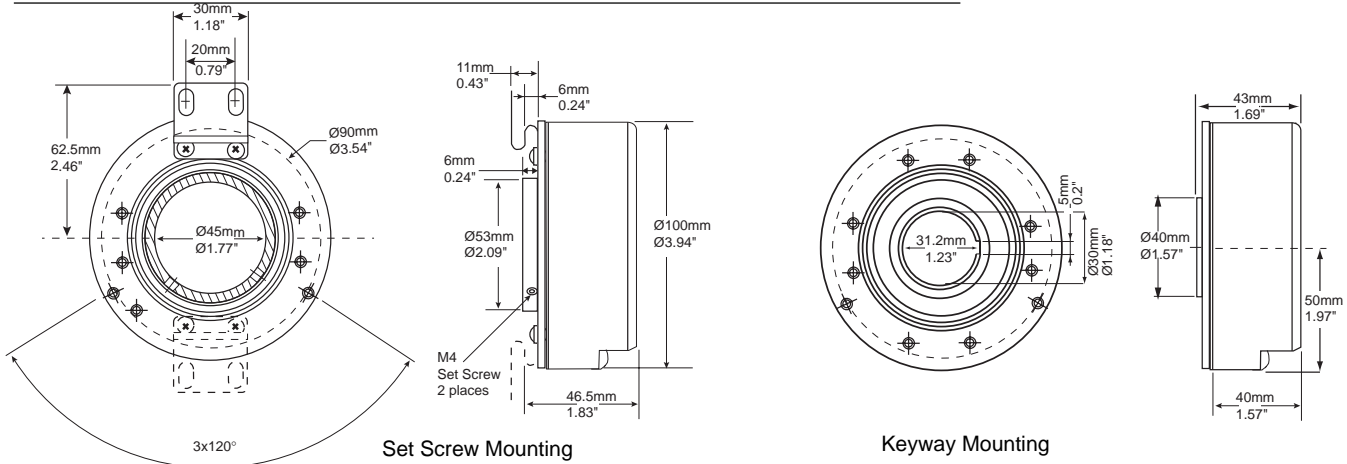
**Ordering Information**

To order, complete the model number with code numbers from the table below:

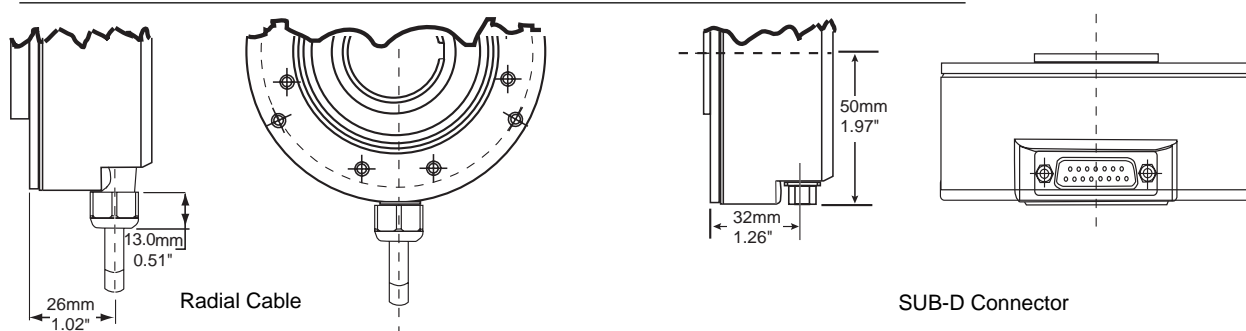
Code 1: Model	Code 2: Resolution	Code 3: Voltage	Code 4: Mounting	Code 5: Protection	Code 6: Shaft Fixing	Code 7: Shaft Size	Code 8: Output	Code 9: Connection	Code 10: Cable Length
Ordering Information									
<b>RI80E</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
RI80E	1024 2048 4096 5000	A 5 VDC B 5-30VDC	O No Tether A Single Tether B Dual Tether	0 IP40 1 IP50 4 IP64	K Keyway G Setscrew	30 30mm 32 32mm 38 38mm 45 45mm	I Push-Pull, Diff+Alarm with Voltage B K Push-Pull + Alarm with Voltage B R RS422 + Alarm with Voltage A or B	F Radial Cable 3 9 pin d-Sub Connector 4 15 pin d-Sub Connector	Blank 1.5m (standard) DO 3m FO 5m KO 10m PO 15m UO 20m VO 25m

**DIMENSIONS**

**Codes 4, 6: Tether, Mounting/Shaft**



**Code 8: Connections**



**Satellite Locations:**

- **North America:** North Carolina, South Carolina, Connecticut, Massachusetts, New York, Canada, British Virgin Islands
- **West Indies:** St. Kitts • **Europe:** United Kingdom, Italy, France, Germany, Spain, Slovakia
- **South America:** Brazil • **Asia:** China, Japan, Korea, Singapore

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