

# DRAW WIRE

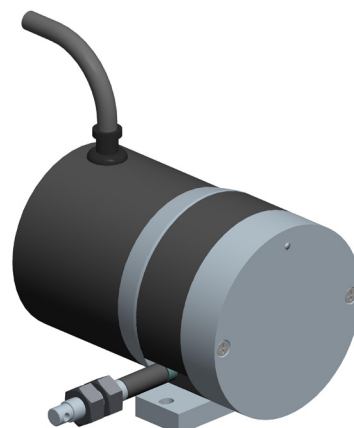
Miniature absolute draw wire encoder

Series

SFA



- Absolute draw-wire encoder
- Robust and compact design
- Resolution from 0.1 to 0.012 mm
- Measuring range 1000 and 2000 mm



SFA

## ENVIRONMENTAL SPECIFICATIONS

|                              |                              |
|------------------------------|------------------------------|
| Operating temperature range: | -25°C + 85°C (-13°F + 185°F) |
| Protection:                  | IP64                         |

## MECHANICAL SPECIFICATIONS

|                        |               |
|------------------------|---------------|
| Dimensions:            | see drawing   |
| Stroke per turn:       | 100 mm        |
| Wire retraction force: | 5 ÷ 15 N      |
| Measuring length:      | 1000, 2000 mm |
| Measuring speed:       | 1 m/sec max.  |
| Weight:                | ~ 0,3 kg      |
| Connections:           | cable 2,0 m   |

## ELECTRICAL SPECIFICATIONS

|                    |  |
|--------------------|--|
| Resolution:        | 0.012, 0.025, 0.05, 0.1 mm                                 |
| Output code:       | Binary, Gray   |
| Power supply:      | +10Vdc +30Vdc  |
| Power consumption: | 25 mA max.   |
| Output circuits:   | SSI (25 bit, LSB aligned, clock 300 kHz max, Tp > 64 µsec) |
| Protection:        | against inversion of polarity                              |
| EMC:               | acc. to EN-61000-4-2/A1<br>EN-61000-4-4                    |
| Battery life:      | 10 years min.  |
| Function:          | Zero setting   |

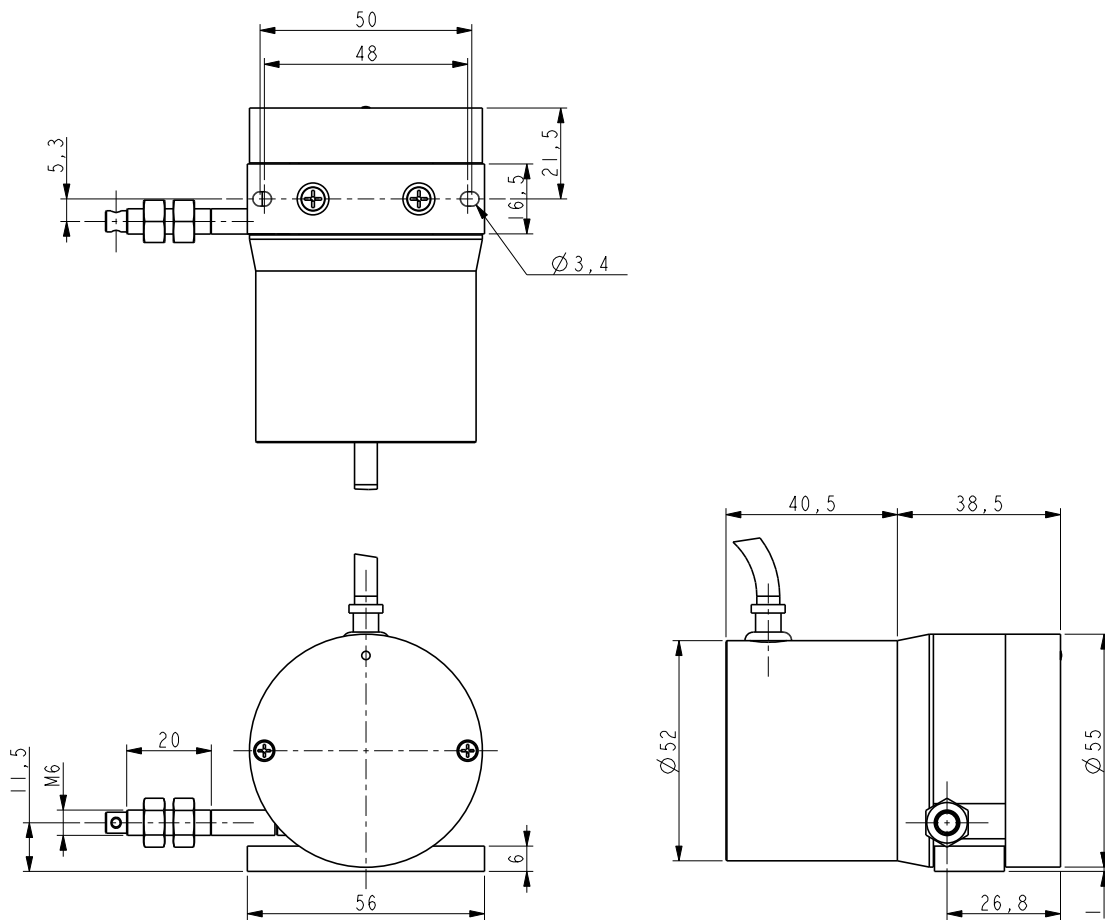
## MATERIALS

|          |   |
|----------|---|
| Housing: | non corroding, UNI EN AW-6082               |
| Wire:    | stainless steel, non magnetic - UNI EN 4305 |

## ELECTRICAL CONNECTIONS

| 1      | Function     |
|--------|--------------|
| Yellow | Clock in +   |
| Blue   | Clock in -   |
| Green  | Data out +   |
| Orange | Data out -   |
| White  | Zero setting |
| Red    | +Vdc         |
| Black  | 0Vdc GND     |

1 = Lika encoder cable M8 (8x0,25 mm<sup>2</sup>)



SFA

Order code

|     |   |      |   |    |   |      |   |     |
|-----|---|------|---|----|---|------|---|-----|
| SFA | - | XXXX | - | XX | - | XXXX | - | XXX |
|     |   | Ⓐ    |   | Ⓑ  |   | Ⓒ    |   | Ⓓ   |

Ⓐ MEASURING LENGTH

1000 = 1000 mm  
2000 = 2000 mm

Ⓑ OUTPUT CIRCUIT

BA = SSI, binary code  
GA = SSI, gray code

Ⓒ RESOLUTION

8192 = 0.012 mm  
4000 = 0.025 mm  
2000 = 0.05 mm  
1000 = 0.1 mm

Ⓓ CONNECTIONS

L2 = 2 meters  
Lx = cable length on request  
M0,5 = 0.5 m cable + M12 8 pin inline connector  
M2 = 2 m cable + M12 8 pin inline connector