



## Absolute encoders ARS60 SSI/Parallel

ARS60-F4R02048



**Model Name** > ARS60-F4R02048  
**Part No.** > 1031596



#### At a glance

- Absolute singleturn encoder
- Resolution: up to 15 bits (32,768 increments)
- Electrical interface: SSI with gray code type or gray capped
- Electrical interface: Parallel with gray, gray capped, binary, BCD code type
- Zero-set function
- Mechanical interfaces: face mount flange, servo flange, blind and through hollow shaft
- Enclosure rating: Up to IP66

#### Your benefits

- Freely programmable resolution (up to 15 bits)
- Simple zero adjustment directly by press of a button on the encoder or via signal line (cable version)
- Suitable for all mounting methods thanks to individual mechanical interfaces
- A basic device for flexible use thanks to simple interchangeable collets for blind hollow shaft and through hollow shaft
- Versions with cable and M23 connector outlet available in axial and radial designs



#### Performance

|                                      |                                                                          |
|--------------------------------------|--------------------------------------------------------------------------|
| Max. number of steps per revolution: | 2,048                                                                    |
| Max. number of revolutions:          | 1                                                                        |
| Resolution power:                    | 2,048 x 1                                                                |
| Error limits:                        | 0.035 ° (binary number of steps)<br>0.046 ° (non-binary number of steps) |
| Repeat accuracy:                     | 0.005 °                                                                  |
| Measuring step deviation:            | 0.005 °, 0.016 °                                                         |
| Measuring step:                      | 360 ° /number of lines                                                   |
| Initialization time:                 | 80 ms <sup>1)</sup>                                                      |

<sup>1)</sup> Valid positional data can be read once this time has elapsed

#### Electrical data

|                                        |                     |
|----------------------------------------|---------------------|
| Operating voltage range:               | 10 V DC ... 32 V DC |
| Operating power consumption (no load): | 90 mA               |

#### Interfaces

Electrical interface:

Cable, 22-pin, axial, 1.5 m

## Ambient data

EMC:

According to EN 61000-6-2 and EN 61000-6-3 <sup>1)</sup>

Enclosure rating:

IP 66, according to IEC 60529

Permissible relative humidity:

90 % (condensation of the optical scanning not permitted)

Working temperature range:

-20 °C ... 85 °C

Storage temperature range:

-40 °C ... 100 °C

Resistance to shocks:

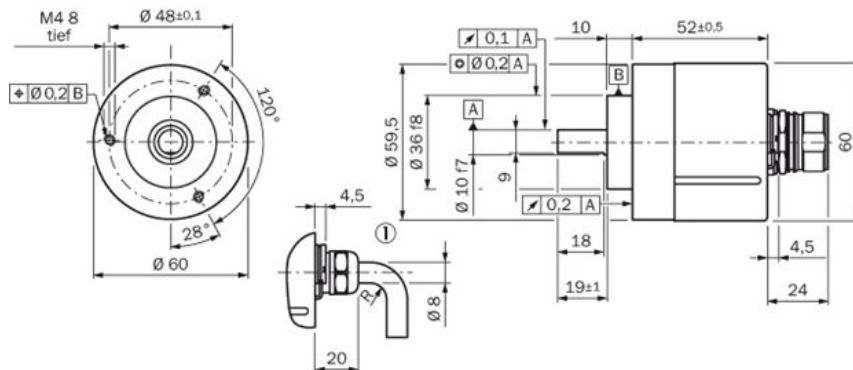
50 g (according to EN 60068-2-27)

Resistance to vibration:

20 g, 10 Hz ... 2,000 Hz (according to EN 60068-2-6)

<sup>1)</sup>

## Dimensional drawing



## PSDI

|         |    |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---------|----|----|----|----|----|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Clock + | 1  | 2  | 3  | 4  | 5  | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|         | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5  | 4  | 3  | 2  | 1  | 0  | E1 | 0  | 14 | 13 | 12 | 11 | 10 | 9  | 8  |    |

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