



Incremental encoders DFS60

DFS60E-S1UA01250



Model Name > DFS60E-S1UA01250
Part No. > 1058809



Illustration may differ

At a glance

- Compact installation depth
- High resolution up to 16 bits
- Optionally programmable: Output voltage, zero pulse position, zero pulse width and number of pulses
- Connection: Radial or axial cable outlet, M23 or M12 connector, axial or radial
- Electrical interfaces: 5V & 24V TTL/RS-422, 24 V HTL/push pull
- Mechanical interfaces: face mount or servo flange, blind or through hollow shaft
- Remote zero set possible

Your benefits

- Reduced storage costs and downtime due to customer-specific programming
- Variety of different mechanical and electrical interfaces enable the encoder to be optimally adjusted to fit the installation situation
- Excellent concentricity even at high speeds
- High resolution of up to 16 bits ensures precise measurements
- Permanent and safe operation due to a high enclosure rating, temperature resistance and a long bearing lifetime
- Programmability via the PGT-08 programming software and the PGT-10-S display programming tool allow the encoder to be adapted flexibly and quickly according to customer needs
- Programmable zero pulse position simplifies installation



Electrical data

MTTFd: mean time to dangerous failure: 300 a (EN ISO 13849-1) ¹⁾

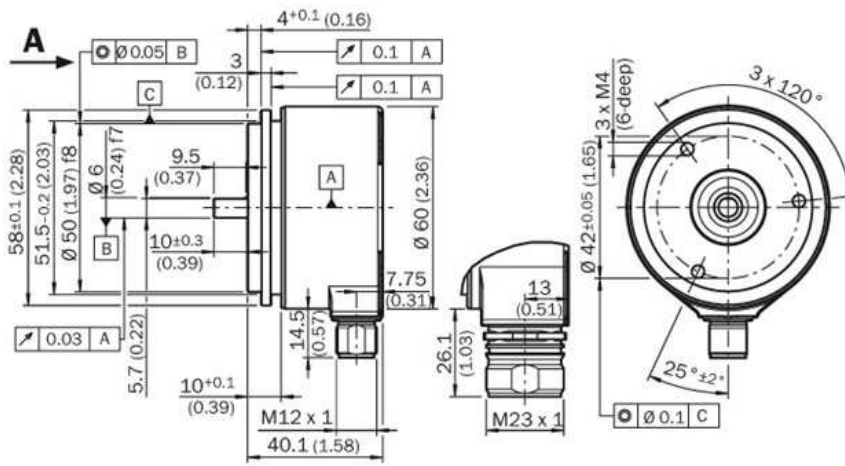
¹⁾ This product is a standard product and does not constitute a safety component as defined in the Machinery Directive.

Calculation based on nominal load of components, average ambient

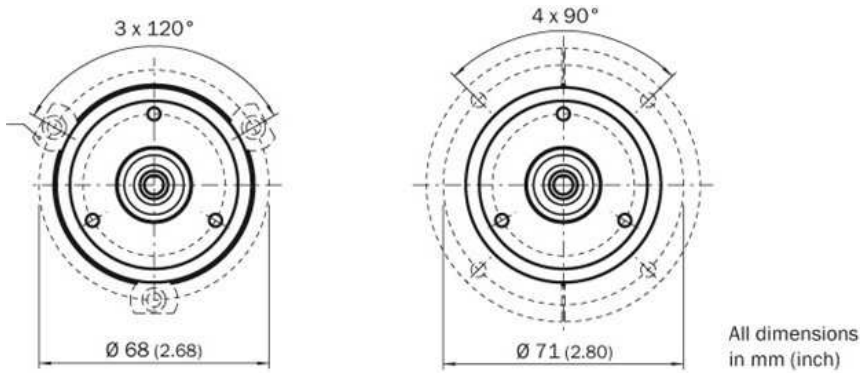
temperature 40°C, frequency of use 8760 h/a. All

electronic failures are considered hazardous. For more information, see document no. 8015532.

Dimensional drawing



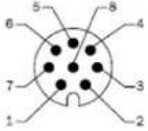
Proposed fitting



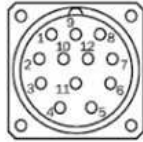
PIN assignment

8-core cable

View of M12 device connector on encoder



View of M23 device connector on encoder



| PIN, 8-pin, M12 connector | PIN, 12-pin, M23 connector | Core colors of encoders with cable outlet | TTL/HTL signal | Explanation |
|---------------------------|----------------------------|---|-----------------|---|
| 1 | 6 | Brown | \bar{A} | Signal cable |
| 2 | 5 | White | A | Signal cable |
| 3 | 1 | Black | \bar{B} | Signal cable |
| 4 | 8 | Pink | B | Signal cable |
| 5 | 4 | Yellow | \bar{Z} | Signal cable |
| 6 | 3 | Lilac | Z | Signal cable |
| 7 | 10 | Blue | GND | Ground connection of the encoder |
| 8 | 12 | Red | +U _s | Supply voltage (volt-free to housing) |
| - | 9 | - | N.C. | Not assigned |
| - | 2 | - | N.C. | Not assigned |
| - | 11 | - | N.C. | Not assigned |
| - | 7 ⁱⁱ | - | SET | Zero pulse teach |
| Shield | Shield | Shield | Shield | Shield connected to housing on side of encoder. Connected to ground on side of control. |

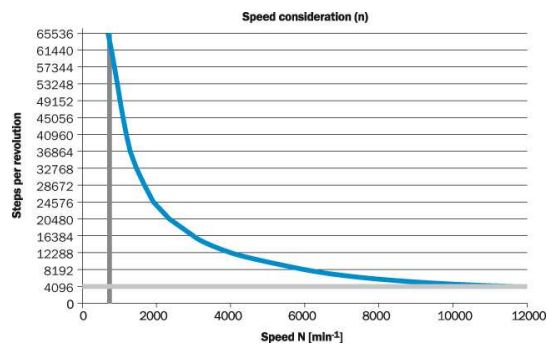
ⁱⁱ Only at 4.5 ... 22 V, TTL/HTL programmable

The SET input serves to carry out the zero pulse teach function. If the SET input is applied to U_s for longer than 250 ms, after it has been open for at least 1,000 ms or applied to GND, the current shaft position is assigned the zero pulse signal "Z".

Signalansgänge

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Drehzahlbetrachtung



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