SIEMENS

# Data sheet for Absolute encoder

## Article No. : 6FX2001-5SS24



Figure similar

Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

| Electrical data | |
|---|---|
| Operating voltage Up | DC 10 ... 30 V |
| Current consumption, approx. | 200 mA |
| Interface | SSI |
| Clock input | Differential line receiver according to EIA Standard RS 485 |
| Data output | Differential line driver according to EIA Standard RS 485 |
| Short-circuit strength | Yes |
| **Cable length up to the subsequent electronics, max.** | |
| Up to 100 kHz | 400 m |
| Up to 300 kHz | 100 m |
| Up to 1 MHz | 50 m |
| Connection | M23 flange socket, Axial |
| Resolution | 25 bit |
| Telegram | 25 bit, without parity |
| **Code type** | |
| Sampling | Gray |
| Transmission | Gray, fir-tree format |
| **Parameterizability** | |
| Preset | Yes |
| Counting direction | Yes |
| Accuracy | ± 79 " (with 8192 increments) |
| Friction torque (at 20°C) | ≤ .01 |
| Starting torque (at 20°C) | ≤ .01 |

| Mechanical data | |
|---|---|
| Speed max. | |
| With ± 1 LSB accuracy | 5,000 rpm |
| With ± 100 LSB accuracy | 10,000 rpm |
| Mechanical | 10,000 rpm |
| **Load capacity** | |
| n ≤ 6000 rpm | |
| - Axial | 40 N |
| - Radial at shaft end | 60 N |
| n > 6000 rpm | |
| - Axial | 10 N |
| - Radial at shaft end | 20 N |
| Shaft diameter | 10 mm |
| Shaft length | 20 mm |
| Angular acceleration, max. | 100,000 rad/s² |
| Rotor moment of inertia | 0.00000145 kgm² |

| **Vibration and shock** | |
|---|---|
| Vibration (55...2000 Hz) according to EN 60068-2-6, max | 300 m/s² |
| 6 ms according to EN 60068-2-27, max | 1,000 m/s² |
| **Degree of protection** | |
| At housing | IP67 |
| At shaft input | IP64 |
| Net weight | 0.35 kg |

| Ambient temperature | |
|---|---|
| During operation | -40 ... 85 °C |

| Standards | |
|---|---|
| Compliance with standards | CE, cULus |
| EMC class filter | Tested to DIN EN 50081 and EN 50082 |