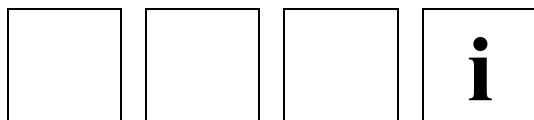


Absolute-Encoder CDH 75 M - SSI

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- Two redundant SSI interfaces
- Type with hollow through shaft, up to 20 mm
- Certified for the operational in connection with SIL 3 or SIL 2 safety functions
- Functional Safety according to
 - DIN EN 61508; VDE 0803: SIL 3, SIL 2
 - DIN EN ISO 13849: PL e, PL d
- Master system: 13 bit resolution, 4096 revolutions; SIN-/COS signals or incremental signals for position feedback
- Safety system: 13 bit resolution, 4096 revolutions

5.A

Characteristics

| | |
|---|--|
| Supply voltage..... | 11...28 VDC |
| Current consumption without load | < 150 mA, at 24 V DC |
| Master System | |
| - Total resolution | ≤ 25 Bit |
| - Number of steps/revolution..... | ≤ 8.192 |
| - Number of revolutions | ≤ 4.096 |
| - Accuracy..... | 13 Bit single turn |
| - SSI interface, Hamming distance 3 | TR specific protocol with functional information's and CRC |
| - Incremental signals, standard | 4096 periods/revolution, max. 20480 periods/revolution |
| - SIN/COS signals, alternative to incremental signals | 4096 periods/revolution |
| - Cycle time..... | ≥ 250 μs |
| Safety System | |
| - Total resolution | ≤ 25 Bit |
| - Number of steps/revolution..... | ≤ 8.192 |
| - Number of revolutions | ≤ 4.096 |
| - Accuracy..... | 8 Bit single turn |
| - SSI interface, Hamming distance 3 | TR specific protocol with functional information's and CRC |
| - Cycle time..... | ≥ 250 μs |
| Safety | is guaranteed in connection with a control which is certified in accordance with SIL 3/2 and the monitoring conditions defined by TR |
| - Functional Safety..... | Safety Integrity Level (SIL): 3, acc. to DIN EN 61508; VDE 0803 Performance Level (PL): e, acc. to DIN EN ISO 13849 |
| - PFH, complete system | < 10 * 10 ⁻⁹ 1/h |
| Mechanically permissible speed | ≤ 3.000 min ⁻¹ |
| Shaft load | Own mass |
| Bearing life time | ≥ 3.9 * 10 ¹⁰ revolutions at |
| - Speed | ≤ 1.500 min ⁻¹ |
| - Operating temperature | ≤ 60 °C |
| Permissible angular acceleration | ≤ 10 ⁴ rad/s ² |
| Moment of inertia | typically 2.5 * 10 ⁻⁶ kg m ² |
| Start-up torque at 20°C | typically 2 Ncm |
| Mass..... | 1 kg |

Environmental conditions

| | |
|--|---|
| Vibration | DIN EN 60068-2-6 |
| Shock..... | DIN EN 60068-2-27 |
| Immunity to disturbance | |
| - DIN EN 61000-4-2 | Electrostatic discharge, ESD |
| - DIN EN 61000-4-3 | Radio-frequency, electromagnetic fields |
| - DIN EN 61000-4-4 | Electrical fast transient/burst |
| - DIN EN 61000-4-6 | Conducted disturbances, induced by radio-frequency fields |
| - DIN EN 61000-4-11 | Voltage dips, short interruptions and voltage variations |
| Transient emissions..... | DIN EN 50081-1, DIN EN 55022 Class B, Industrial environment |
| - DIN EN 55022..... | Interference fields < 30 MHz; Interference fields 30...1000 MHz |
| Working temperature..... | -10 °C...+70 °C, in case of free assembly |
| Storage temperature..... | -30 °C...+80 °C, dry |
| Relative humidity, DIN EN 60068-3-4: 2002 | 98 %, non condensing |
| Protection class, DIN EN 60529: 1991 ²⁾ | IP 54 |

²⁾ valid with screwed on mating connector and / or screwed together cable gland

Dimension drawing

For your project please request article number-related dimensional drawings !

