Absolute-Encoder CES 58 M - SSI

TRWinprog

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TRelectronic
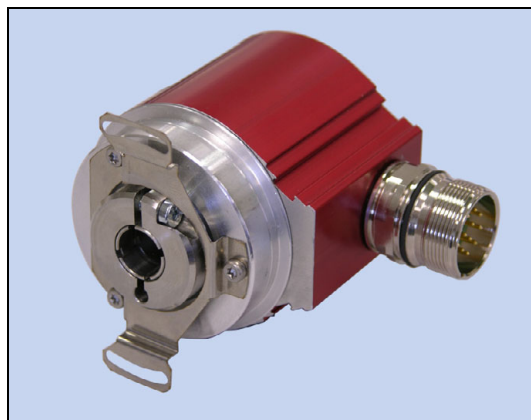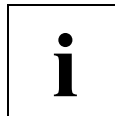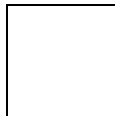
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- **SSI interface**
- **Type with blind shaft**
- **Modular product line**
- **Extensive parameter setting possibilities**
- **Special parameters upon request**
- **Short lead times**
- **Further interfaces available**
- **Modular construction for mechanical customizations**

5.A

Characteristics

Supply voltage	11…27 VDC
Current consumption without load	< 350 mA
Total resolution [1]	≤ 25 Bit
Number of steps/revolution [1]	≤ 8.192
Number of revolutions, standard [1]	≤ 4.096
Number of revolutions, extended [1]	≤ 256.000
SSI	Synchronous-Serial-Interface
Clock input	Optocoupler
Data output	RS-422, 2-wire
Clock frequency	80 kHz – 1 MHz
Mono time t_M	16 µs ≤ t_M ≤ 25 µs, typically 20 µs
Output code [1]	Binary, Gray, BCD
Output format [1]	Standard, Tree format, SSI+CRC, 26-bit repeat, variable number of data bits
Negative values [1]	Sign + Value, Two's complement
SSI- or parallel special bits [1]	Cams, Overspeed, Direction, Moving, Error, Parity
F/R [1]	Count direction
Preset [1]	electronic adjustment
Logic level	"0" < + 2 VDC, "1" = Supply voltage
Mechanically permissible speed	≤ 12.000 min^{-1}
Shaft load	Own mass
Bearing life time	≥ 3.9 * 10^{10} revolutions at
- Speed	≤ 6.000 min^{-1}
- Operating temperature	≤ 60 °C
Shaft diameter in mm	8H7, 10H7, 12H7
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	0.3 kg…0.5 kg
Optional	
- Incremental signals, RS422 level	K1+, K1-, K2+, K2- with 1024 or 2048 pulses

[1] programmable parameter

11/09   Revision 02

Subject to change

CES58M-SSI-1-GB-1-02.DOC

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CES58M-SSI-1-GB-1

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Environmental conditions

Vibration, DIN EN 60068-2-6: 1996 .... ≤ 100 m/s^2, sine 50-2000 Hz

Shock, DIN EN 60068-2-27: 1995 .... ≤ 1000 m/s^2, half-sine 11ms

EMC

    - Transient emissions, DIN EN 61000-6-3: 2007

    - Immunity to disturbance, DIN EN 61000-6-2: 2006

Working temperature .... 0 °C…+60 °C, optional -20 °C…+70 °C

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 65

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

Dimension drawing   (For project planning please request customized dimensional drawing !)