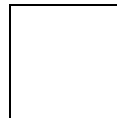
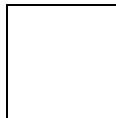
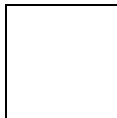


Absolute-Encoder COH 110 S/M - SSI

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 D-78647 Trossingen
 Tel. +49 - (0) 74 25 / 228 - 0
 Fax +49 - (0) 74 25 / 228 - 33
 http://www.tr-electronic.de
 Germany



- SSI interface
- Type with hollow through shaft, \varnothing 30...50 mm
- High resolution measuring system, up to 18 bit
- Extensive parameter setting possibilities
- Special parameters upon request

5.A

Characteristics

Supply voltage.....	11...27 VDC, optional 5 VDC \pm 5%
Current consumption without load	< 110 mA, < 150 mA at 5 VDC
Total resolution ¹⁾	Multi-Turn: \leq 36 Bit, Single-Turn: \leq 18 Bit
Number of steps/revolution ¹⁾	\leq 262.144
Number of revolutions, standard ¹⁾	Multi-Turn: \leq 4.096, Single-Turn: 1
Number of revolutions, extended ¹⁾	Multi-Turn: \leq 256.000, Single-Turn: 1
SSI	Synchronous-Serial-Interface
Clock input	Optocoupler
Data output.....	RS-422, 2-wire
Clock frequency	80 kHz – 1 MHz
Mono time t_M	$16 \mu s \leq t_M \leq 25 \mu s$, typically 20 μs
Output code ¹⁾	Binary, Gray
Output format ¹⁾	Standard, SSI+CRC
SSI- special bits ¹⁾	Toggle-Bit, further on request
Cycle time, internal.....	250 ns
F/R ¹⁾	Count direction
Preset ¹⁾	electronic adjustment
Logic level	"0" < + 2 VDC, "1" = Supply voltage
Mechanically permissible speed	\leq 2.000 min ⁻¹
Shaft load.....	Own mass
Bearing life time	\geq 3.9 * 10 ¹⁰ revolutions at
- Speed	\leq 2.000 min ⁻¹
- Operating temperature	\leq 60 °C
Shaft diameter in mm.....	30H7 with groove...50H7 without groove
Permissible angular acceleration	\leq 10 ⁴ rad/s ²
Moment of inertia	typically 525 * 10 ⁻⁶ kg m ²
Start-up torque at 20°C	typically 8 Ncm
Mass.....	typically 1.75 kg
Optional	
- Incremental signals, RS422 level/Push-Pull.....	K1+, K1-, K2+, K2-, K0+, K0- with 4096 pulses

¹⁾ programmable parameter

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 54

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

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

