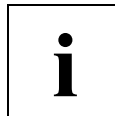
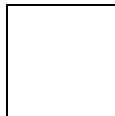
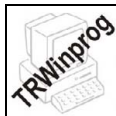


Absolute-Encoder QEH 80 S/M - SSI

Eglishalde 6
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
- Modular product line
- Rugged construction
- Extensive parameter setting possibilities
- Further interfaces available
- Customized adaptations upon request

5.A

Characteristics

Supply voltage.....	11...27 VDC
Current consumption without load	< 200 mA
Total resolution ¹⁾	Multi-Turn: ≤ 25 Bit, Single-Turn: ≤ 13 Bit
Number of steps/revolution ¹⁾	≤ 8.192
Number of revolutions, standard ¹⁾	Multi-Turn: ≤ 4.096, Single-Turn: 1
Number of revolutions, extended ¹⁾	Multi-Turn: ≤ 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 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
Parallel outputs	Push-Pull, max. 8
- Output current.....	50 mA per output, short-circuit proof
F/R ¹⁾	Count direction
Preset ¹⁾	electronic adjustment
Logic level	"0" < + 2 VDC, "1" = Supply voltage
Mechanically permissible speed	≤ 3.000 min ⁻¹
Shaft load	Own mass
Bearing life time	≥ 3.9 * 10 ¹⁰ revolutions at
- Speed	≤ 3.000 min ⁻¹
- Operating temperature	≤ 60 °C
Shaft diameter in mm	16H7, 20H7 with/without keyway, 24H7, 25H7 without keyway
Permissible angular acceleration	≤ 10 ⁴ rad/s ²
Moment of inertia	typically 57.2 * 10 ⁻⁶ kg m ²
Mass.....	typically 1.3 kg

¹⁾ programmable parameter

Environmental conditions

Vibration, DIN EN 60068-2-6: 1996..... $\leq 100 \text{ m/s}^2$, sine 50-2000 Hz
Shock, DIN EN 60068-2-27: 1995..... $\leq 1000 \text{ m/s}^2$, half-sine 11ms
EMC
- Discharge of static electricity, DIN EN 61000-4-2: 2001
- Burst, DIN EN 61000-4-4: 2004
- Immunity to disturbance, DIN EN 61000-6-2: 2001
Working temperature..... $0 \text{ }^\circ\text{C} \dots +60 \text{ }^\circ\text{C}$, optional $-20 \text{ }^\circ\text{C} \dots +70 \text{ }^\circ\text{C}$
Storage temperature..... $-30 \text{ }^\circ\text{C} \dots +120 \text{ }^\circ\text{C}$, 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

