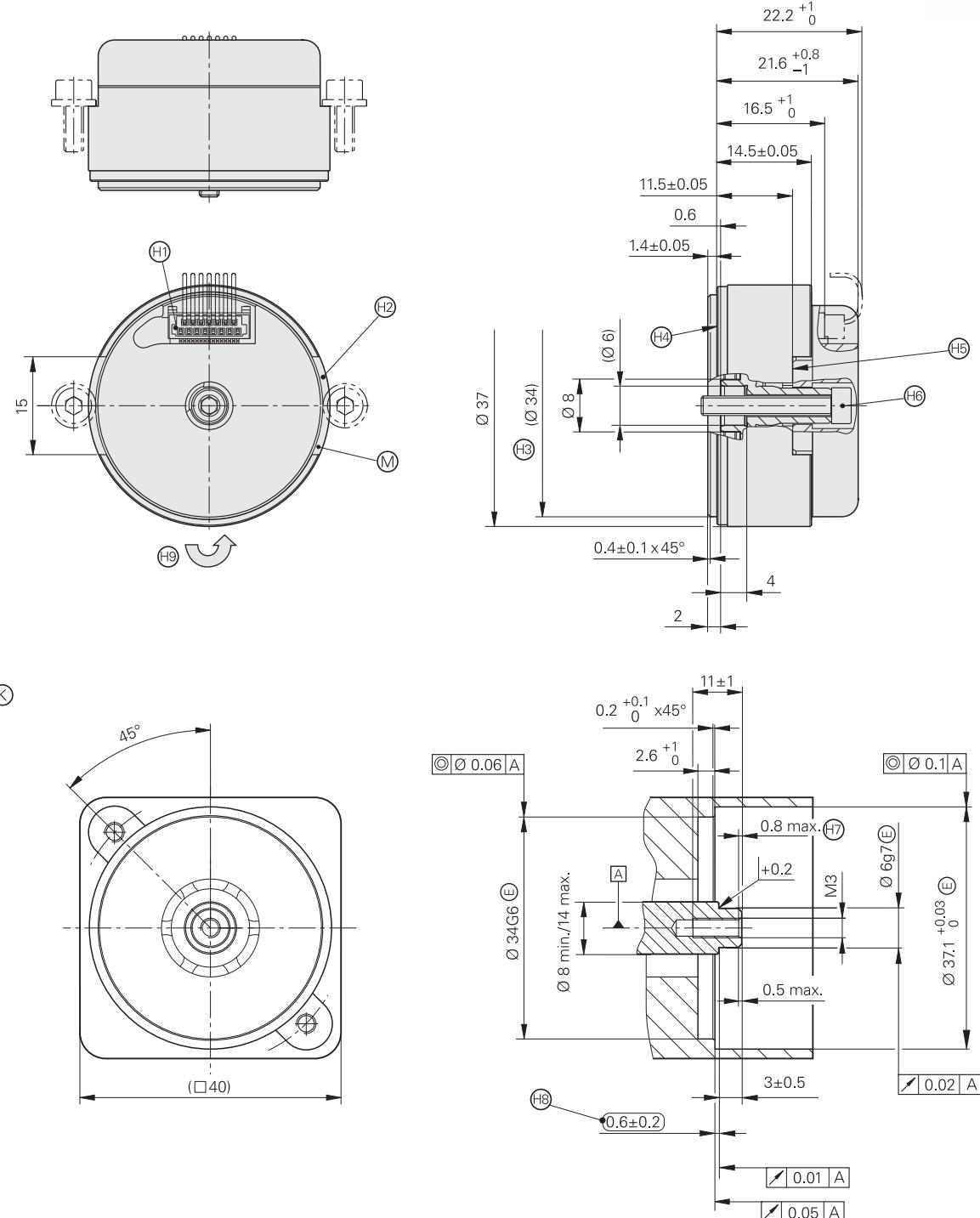


ECI/EQI 1100 Series

Rotary encoders without integral bearing for integration in motors

- Installation diameter 37 mm
- Blind hollow shaft



- Ⓐ = Bearing of mating shaft
- Ⓑ = Required mating dimensions
- Ⓜ = Measuring point for operating temperature
- Ⓜ = PCB connector, 15-pin
- Ⓜ = Permissible surface pressure (material: aluminum 230 N/mm²)
- Ⓜ = Centering collar
- Ⓜ = Bearing surface
- Ⓜ = Clamping surfaces
- Ⓜ = Self-locking screw M3 x 20, ISO 4762, width A/F 2.5, tightening torque: 1.2 ±0.1 Nm
- Ⓜ = Start of thread
- Ⓜ = Maximum permissible deviation between shaft and flange surfaces.
Compensation of mounting tolerances and thermal expansion, no dynamic motion permitted
- Ⓜ = Direction of shaft rotation for output signals as per the interface description

	Absolute					
	ECI 1118		EQI 1130			
Incremental signals	~ 1 V _{PP}	None	~ 1 V _{PP}	None		
Line count	16	-	16	-		
Cutoff frequency –3 dB	≥ 6 kHz typical	-	≥ 6 kHz typical	-		
Absolute position values	EnDat 2.1					
Ordering designation*	EnDat 01	EnDat 21	EnDat 01	EnDat 21		
Position values/rev	262144 (18 bits)					
Revolutions	-		4096 (12 bits)			
Elec. permissible speed/ deviations ¹⁾	4000 min ⁻¹ /± 400 LSB 15000 min ⁻¹ /± 800 LSB	15000 min ⁻¹ (for continuous position value)	4000 min ⁻¹ /± 400 LSB 12000 min ⁻¹ /± 800 LSB	12000 min ⁻¹ (for continuous position value)		
Calculation time t _{cal}	≤ 8 µs					
System accuracy	± 280"					
Power supply	5 V DC ± 5 %					
Power consumption (maximum)	≤ 0.85 W		≤ 1.00 W			
Current consumption (typical)	120 mA (without load)		145 mA (without load)			
Electrical connection	Via PCB connector, 15-pin					
Shaft	Blind hollow shaft Ø 6 mm, axial clamping					
Mech. permiss. speed n	≤ 15000 min ⁻¹		≤ 12000 min ⁻¹			
Moment of inertia of rotor	0.76 · 10 ⁻⁶ kgm ²					
Permissible axial motion of measured shaft	± 0.2 mm					
Vibration 55 Hz to 2000 Hz Shock 6 ms	≤ 300 m/s ² (EN 60068-2-6) ≤ 1000 m/s ² (EN 60068-2-27)					
Max. operating temp.	115 °C					
Min. operating temp.	–20 °C					
Protection EN 60529	IP 20 when mounted					
Weight	Approx. 0.06 kg					

* Please select when ordering

¹⁾ Velocity-dependent deviation between the absolute and incremental signals

Representante oficial de:



[Argentina – Bolivia – Chile – Colombia - Costa Rica – Ecuador - El Salvador –
Guatemala – Honduras – Nicaragua – Panamá – Paraguay – Perú -
República Dominicana – Uruguay – Venezuela.]



Calle 49 N° 5764 - Villa Ballester (B1653AOX) - Prov. de Buenos Aires - ARGENTINA
Tel: (+54 11) 4768-4242 / Fax: (+54 11) 4849-1212
Mail: ventas@nakase.com.ar / Web: www.nakase.com.ar

