

OCD-EIC1B-1213-C10S-PRM



Interface

Interface	Profinet
Speed	Real Time (RT), Isochronous Real Time (IRT)
Profile	Profidrive Profile 4.x, Encoder Profile 4.0, 4.1, 4.2
Diagnostics	Different faults and warnings for Memory, Temperature, Synchronization, Commissioning diagnostics, Commissioning invalid scaling, Communication, Master's sign of life
Features	Boot-Loader, Round Axis, Flashing LEDs, MRP, MRPD, Acceleration values
Transmission Rate	100 Mbit
Interface Cycle Time	$\geq 125 \mu\text{s}$
Programming Functions	Resolution, time base and filter for velocity, preset, counting direction, IP-Address, Fractional scaling, Encoder parameter control via GSDML or Non-Volatile memory

Outputs

Output Driver

Ethernet

Electrical Data

Supply Voltage

10 – 32 VDC

Current Consumption

$\leq 250 \text{ mA @ } 10 \text{ V DC}$, $\leq 100 \text{ mA @ } 24 \text{ V DC}$

Power Consumption

$\leq 3 \text{ W}$

Start-Up Time

$< 15 \text{ s}$

Max. Permissible Electric Speed

12000 1/min (12bit), 1000 1/min (16bit)

Reverse Polarity Protection

Yes

Short Circuit Protection

Yes

EMC: Emitted Interference

DIN EN 61000-6-4

EMC: Noise Immunity

DIN EN 61000-6-2

MTTF

95 years @ 40 °C

Sensor

Technology

Optical

Resolution Singleturn

13 bit

Resolution Multiturn

12 bit

Multiturn Technology

Mechanical Gearing (no Battery)

Accuracy (INL)

$\pm 0.0220^\circ$ (14 – 16 bit), $\pm 0.0439^\circ$ (≤ 13 bit)

Code

Binary

Environmental Specifications

Protection Class (Shaft)	IP66/IP67
Protection Class (Housing)	IP66/IP67
Storage Temperature	-40 °C (-40 °F) – +85 °C (+185 °F)
Humidity	98% RH, no condensation
Max Temperature	+85 °C (+185 °F)
Min Temperature	-40 °C (-40 °F)

Mechanical Data

Housing Material	Steel
Housing Coating	Wet coating (RAL 9006 White Aluminium) + Cathodic corrosion protection (>720 h salt spray resistance)
Flange Type	Clamp, ø 58 mm (C)
Flange Material	Aluminum
Shaft Type	Solid, Single Flat, Length = 20 mm
Shaft Diameter	ø 10 mm (0.39")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Max. Shaft Load	Axial 40 N, Radial 110 N
Minimum Mechanical Lifetime(10 ⁸ revolutions with Fa/Fr)	430 (20N/40N), 150 (40N/60N), 100 (40N/80N), 55 (40N/110N)
Rotor Inertia	≤ 30 gcm ² [≤ 0.17 oz-in ²]

Friction Torque	≤ 5 Ncm @ 20 °C, (7.1 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	≤ 3000 1/min
Shock Resistance	≤ 100 g (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	≤ 10 g (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	≤ 20 g (20 Hz - 2000 Hz, EN 60068-2-6)
Length	80 mm (3.15")
Weight	375 g (0.83 lb)

Electrical Connection

Connection Orientation	Radial
Connector 1	M12, Female, 4 pin, d coded
Connector 2	M12, Male, 4 pin, a coded
Connector 3	M12, Female, 4 pin, d coded

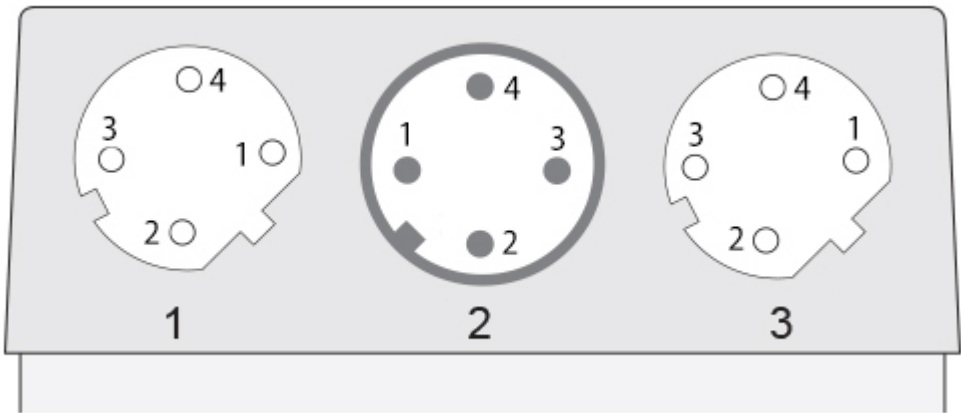
Certification

Approval	CE
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Product Life Cycle

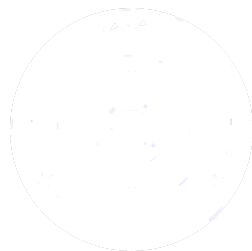
Product Life Cycle	New
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Connection Plan



Signal	Connector	Pin Number
Tx+	1	1
Rx+	1	2
Tx-	1	3
Rx-	1	4
Power Supply	2	1
Not Connected	2	2
GND	2	3
Not Connected	2	4
Tx+	3	1
Rx+	3	2
Tx-	3	3
Rx-	3	4

Dimensional Drawing



Online Datasheet

