

SERIES AD35

ACURO™ brand

Single Turn Absolute Encoder

Key Features

- Short Mounting Depth Allows Installation in Tight Motor Endbells
- Up to 10,000RPM Speed Capability for Majority of Servomotor Applications
- 8mm Hubshaft Mount for Easy Installation



NEW!



SPECIFICATIONS

ELECTRICAL

Supply Voltage: 5 VDC -5 %/+10 % or 7 - 30 VDC

Max. Current w/o Load: 100 mA

Resolution Singleturn: 12 - 19 Bit

Output Code: Gray

Lines/Drives: Clock and Data / RS422

Incremental signals: Sine-Cosine 1 Vpp

Number of Increments: 2,048

3dB Limiting Frequency: 500 kHz

Absolute Accuracy: $\pm 35^\circ$

Repeatability: $\pm 10^\circ$

Alarm Output: Alarm bit (SSI); Warning bit and alarm bit (BiSS)

MECHANICAL

Housing Diameter: 37.5 mm (1.48")

Material Shaft/ Flange/ Housing: Stainless steel/ aluminum/ plastic

Shaft Diameter: 8 mm hub shaft

Mounting: Spring Tether (Hub Shaft)

Protection Class: IP40 Housing & Shaft

Shaft Speed (maximum): 10,000 RPM (continuous), 12,000 RPM (peak)

Torque: ≤ 1 Ncm

Moment of Inertia: approx. 25 gcm²

Shaft Load (solid-shaft): Axial ≤ 5 N; Radial ≤ 10 N

Shaft Load (hubshaft): Spring Tether Tolerance: Axial ± 0.5 mm; Radial ± 0.05 mm

Weight: Aprox. 80g (2.8 oz.)

Connections: Cable, PCB connector, 12 pole

ENVIRONMENTAL

Vibration: 100 m/s² (10 to 500 Hz) (IEC 68-2-6)

Shock: 1,000 m/s² for 6 msec duration (IEC 68-2-27)

Operating Temperature: -15°C to +100°C

Storage temperature: -15°C to +85°C (due to packaging)

CONNECTIONS

PIN	1b	2b	3b	4b	5b	6b
Function	DC 5V / 7-30V (U _p)	Clock	B -	0 V (U _n)	A -	Data
Color	White	Yellow	Grey/Pink	Brown	Brown/Green	Pink
PIN	1a	2a	3a	4a	5a	6a
Function	Data	A +	0 V -Sen	B +	Clock	5V Sensor
Color	Grey	White/Green	Black	Red/Blue	Green	Violet

U_p = power Supply

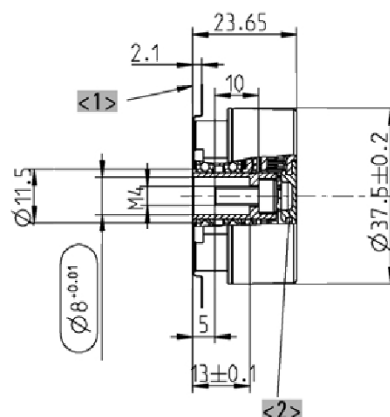
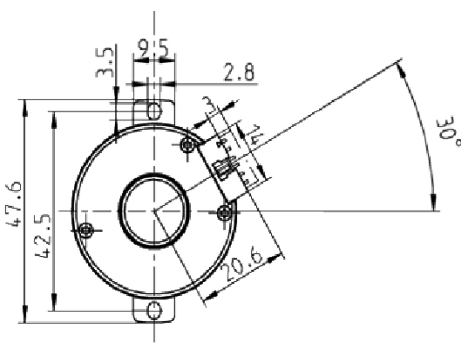
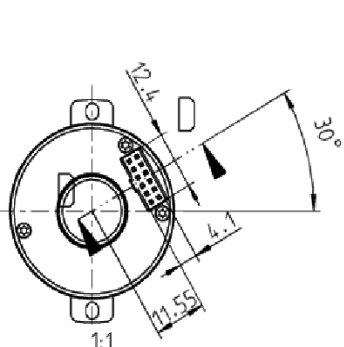
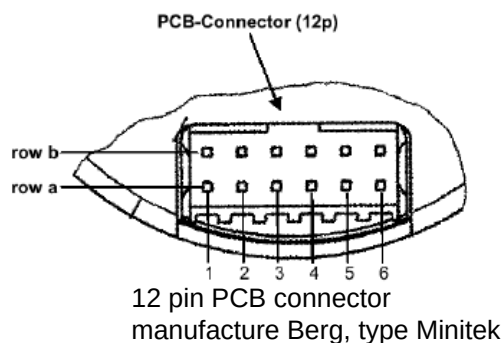
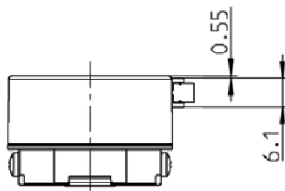
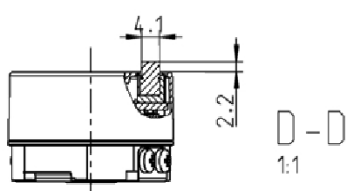
Sensor is connected to Power Supply and 0 V (U_n)

Shield connected to case

Ordering Information

To order, complete the model number with code numbers from the table below:

Code 1: Model	Code 2: Resolution	Code 3: Voltage	Code 4: Flange/Protection/Shaft	Code 5: Interface	Code 6: Connection
AD35	☐ ☐ ☐ ☐	☐	☐ ☐ ☐	☐ ☐	☐
AD35 ACURO Absolute Encoder	0012 12 Bit ST 0013 13 Bit ST 0014 14 Bit ST 0017 17 Bit ST 0019 19 Bit ST (BiSS)	A 5 VDC* E 7-30 VDC * No Inverse polarity protection	F. OR Optional, Spring Tether, IP40, 8mm Hub Shaft	BI BiSS-B BC BiSS-B (+Sin Cos 1Vpp) SG SSI Gray SC SSI Gray (+Sin Cos 1Vpp) BE BiSS-C BV BiSS-C (+Sin Cos 1Vpp)	0 PCB Connector, Axial, 12 pole 2 PCB Connector, Radial, 12 pole A PCB Connector, Axial, 12 pole with Mating Connector and 0.5 m Cable B PCB Connector, Radial, 12 pole with Mating Connector and 0.5 m Cable

Dimensions (mm)**HUB SHAFT**

- <1> Basis shaft
<2> Screw DIN EN ISO 4762, mounting torque 2 Nm

Dimensions in mm



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