

HENGSTLER SERIES AD35

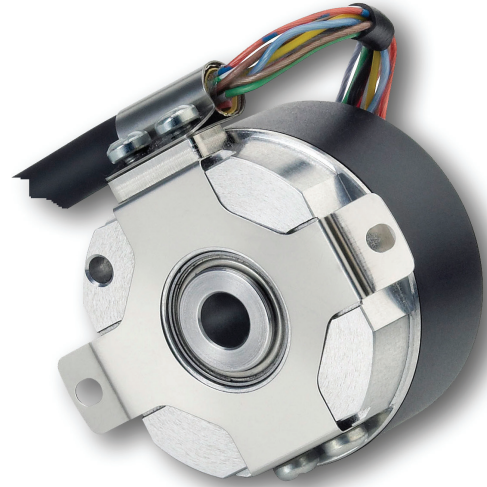


Single Turn Absolute Encoder

Key Features

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

SSM
Servo Small Motor



SPECIFICATIONS

STANDARD OPERATING CHARACTERISTICS:

Code: Absolute
Resolution Single-turn: 12-22 Bit
Absolute Accuracy: ±35°
Repeatability: ±10°

ELECTRICAL:

Interface: BiSS & SSI
Input Power: DC 5 V -5 %/+10 % or DC 7 - 30 V
Current w/o load typ.: 100 mA
Permissible load: Max. 30 mA
Output Code: Gray
Drives: Clock and Data / RS422
Incremental Signals: Sine-Cosine 1 Vpp
Number of Pulses: 2048
3dB Limiting Frequency: 500 kHz
Alarm Output: Alarm bit (SSI Option), Warning bit and alarm bit (BiSS)
Frequency Response (Baud Rate):
 SSI: 100kHz ... 1,5MHz
 BiSS-B/ BiSS-C: 100kHz ... 10 MHz

ELECTRICAL (Cont.):

Noise Immunity: Tested to EN61326-1
Electrical Immunity: Reverse Polarity and Short Circuit Protected for the 7-30 VDC Only
Termination: Cable, PCB connector, 12 pole

MECHANICAL:

Housing Diameter: 38.1 mm
Shaft Diameter: 8mm (Hub Shaft)
Shaft Material: Stainless Steel
Shaft Load (solid-shaft): Axial ≤5 N; Radial ≤10 N
Shaft Load (hubshaft): Spring Tether Tolerance: Axial ±0.5mm; Radial ±0.05mm
Maximum Speed: max. 10,000 rpm (continuous), max. 12,000 rpm (short term)
Starting torque typ.: ≤ 1 Nm
Moment of inertia: Approx. 2.5 gcm²
Mounting: Spring Tether (Hub Shaft)
Housing Material: Plastic
Disc Material: Glass
Weight: 80g (2.8 oz), (ST)

ENVIRONMENTAL:

Standard Operating Temperature: -15 °C ...+120 °C
Storage Temperature: -15 °C ...+85 °C
Shock (DIN EN 60068-2-27): 1,000 m/s² for 6 msec duration (IEC 68-2-27)
Vibration (DIN EN 60068-2-6): 100 m/s² (10 to 2000 Hz) (IEC 68-2-6)
Humidity: 75%, non-condensing
Enclosure Rating: (EN 60529/A1:2000-02): IP40 Housing & Shaft

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	Gray/Pink	Brown	Brown/Green	Pink
PIN	1a	2a	3a	4a	5a	6a
Function	Data	A +	0 V -Sen	B +	Clock	5V Sensor
Color	Gray	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

Analog signals (1Vpp) only available with interface SC (SSI Gray +1Vpp), BC (BiSS-B +1Vpp) and BV (BiSS-C +1Vpp)

HENGSTLER SERIES AD35



Ordering Information

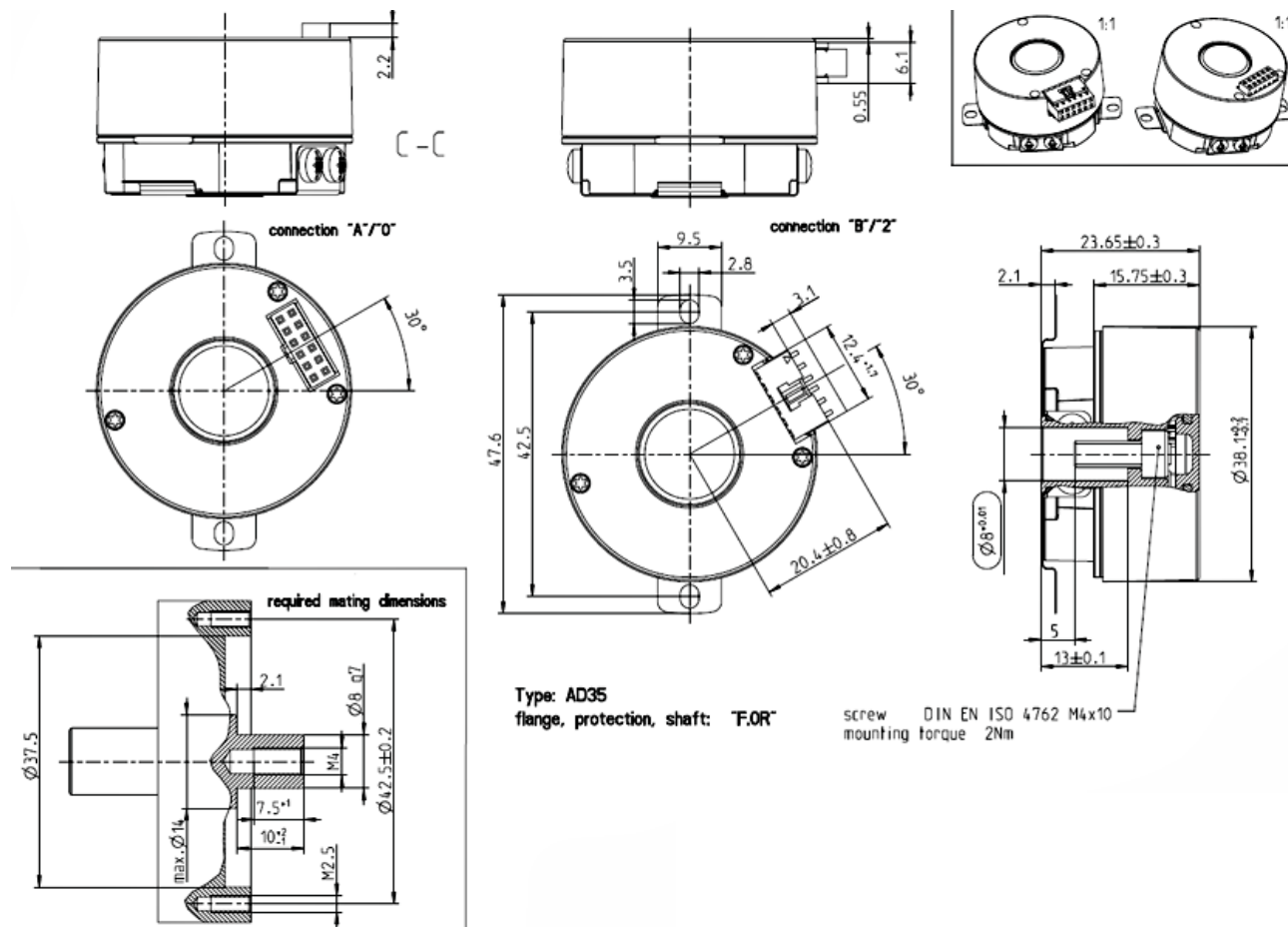
To order, complete the model number with code numbers from the table below:

Code 1: Model	Code 2: Resolution	Code 3: Voltage	Code 4: Flange/Protection/Shaft	Code 5: Interface	Code 6: Termination
AD35	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
AD35 Absolute Encoder	0012 12 Bit ST 0013 13 Bit ST 0014 14 Bit ST 0017 17 Bit ST 0019 19 Bit ST 0022 22 Bit ST	A 5 VDC* E 7-30 VDC	F.OR Spring Tether F, Legs Backward, IP40, 8 mm Hub Shaft U.OR Spring Tether U, Legs Forward, IP40, 8 mm Hub Shaft	BC BiSS-B (+SinCos 1Vpp) SC SSI Gray (+SinCos 1Vpp) BV BiSS- C (+SinCos 1Vpp) SD SSI-Binary (+SinCos 1Vpp) BI, SG, BE, SB available ONLY when Code 6: is A or B BI BiSS-B BE BiSS- C SB SSI-Binary SG SSI-Gray	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

*No inverse-polarity protection for 5V power supply.

DIMENSIONS mm

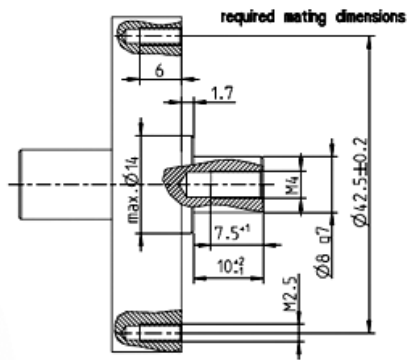
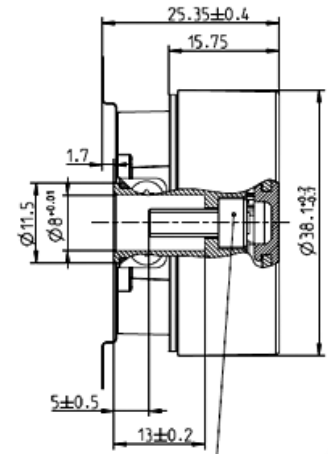
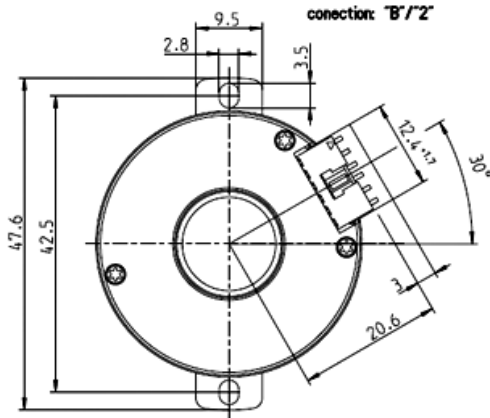
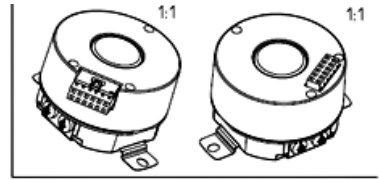
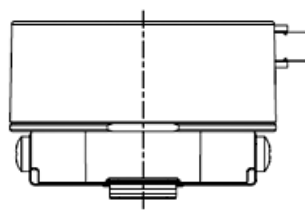
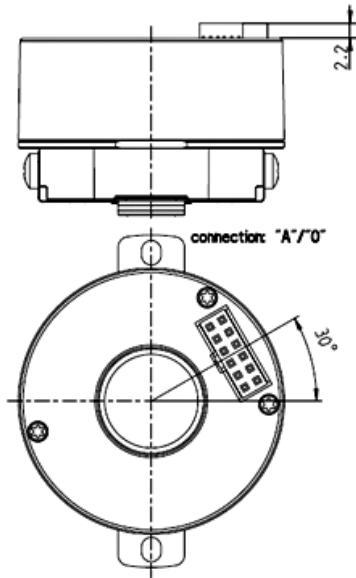
WITH SPRING TETHER "F"



HENGSTLER SERIES AD35



DIMENSIONS mm
WITH SPRING TETHER "U"



Type: AD35
flange, protection, shaft: "U,OR"

screw DIN EN ISO 4762 M4x10
mounting torque 2 Nm

ABSOLUTE ENCODERS

HENGSTLER SERIES AD35



Worldwide Brands: NorthStar™ • Dynapar™ • Hengstler™ • Harowe™

DYNAPAR[™]
INNOVATION - CUSTOMIZATION - DELIVERY

WWW.DYNAPAR.COM

Headquarters: 1675 Delany Road • Gurnee, IL 60031-1282 • USA

Customer Service:

Tel.: +1.800.873.8731

Fax: +1.847.662.4150

custserv@dynapar.com

Technical Support

Tel.: +1.800.234.8731

Fax: +1.847.662.4150

dynapar.techsupport@dynapar.com

European Sales Representative

Hengstler GmbH

Uhlandstrasse 49, 78554 Aldingen
Germany

www.hengstler.com

Hengstler Brand is a trademark of Hengstler GmbH. All rights reserved.
Specifications subject to change without notice.
Document No. 702915-0001, Rev. J ©2018 Dynapar