

SERIES AC36

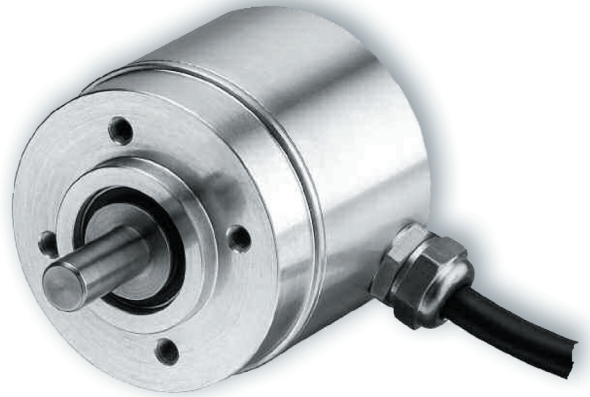
HENGSTLER™ brand

Absolute Encoder

Key Features

- Up to 22 bit singleturn and 12 bit multiturn true absolute positioning
- Available Interfaces include BiSS or SSI Interface
- Small 38mm diameter housing
- Solid or Hubshaft version available
- Wide -40 to +100C temperature range

SSM
Servo Small Motor



E321846



SPECIFICATIONS

STANDARD OPERATING CHARACTERISTICS:

Code: Absolute, Optical
Resolution Single-turn: 12 - 22 Bit
Resolution Multi-turn: 12 Bit
Absolute Accuracy: ±35"
Repeatability: ±7"
ELECTRICAL:
Interface: BiSS, SSI
Input Power: 5 VDC -5 %/+10 %, 7 - 30 VDC
Current w/o Load: 100 mA (ST), 150 mA (MT)
Permissible Load: Max. 30 mA
Output Code: Gray, Binary
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 and alarm bit (BiSS)
Noise Immunity: Tested to EN61326-1
Electrical Immunity: Tested to EN61326-1
Termination: Cable, Axial or Radial

MECHANICAL

Housing Diameter: 38.1 mm
Shaft Size: 6 mm (Solid shaft), 8 mm (Hubshaft)
Axial Endplay of Mounting Shaft: (Hubshaft) ± 0.5 mm
Radial Runout of Mating Shaft: (Hubshaft) ± 0.05 mm
Maximum Speed: max. 10 000 rpm (continuous), max. 12 000 rpm (short term)
Starting Torque typ.: ≤ 1 Ncm (at 20°C)
Moment of Inertia: ca. 2,5 x 10-6 kgm²
Housing Material: Stainless Steel
Shaft Material: Stainless Steel
Disc Material: Glass
Weight:
 Single-Turn: approx. 2.8 oz (80 g)
 Multi-Turn: approx. 4.6 oz. (130 g)

ENVIRONMENTAL

Operating Temperature: -40 °C ...+100°C
Storage Temperature: -25 °C ...+85 °C
Shock: 100G, 1000 m/s² (6 ms)
Vibration: 10G, 100 m/s² (10 ... 2000 Hz)
Humidity: 75% without condensation
Enclosure Rating: IP64 (housing), IP50, IP64 (shaft)

ELECTRICAL CONNECTIONS

SIGNAL	CABLE COLOR
5 / 7-30 V (U _g)	White
0 V (U _n)	Brown
Clock	Yellow
<u>C</u> lock	Green
Data	Pink
<u>D</u> ata	Grey
<u>A</u>	White/Green ¹
<u>A</u>	Brown/Green ¹
<u>B</u>	Red/Blue ¹
<u>B</u>	Grey/Pink ¹
5V Sensor	Violet ¹
0V Sensor	Black ¹

¹only with "SC"

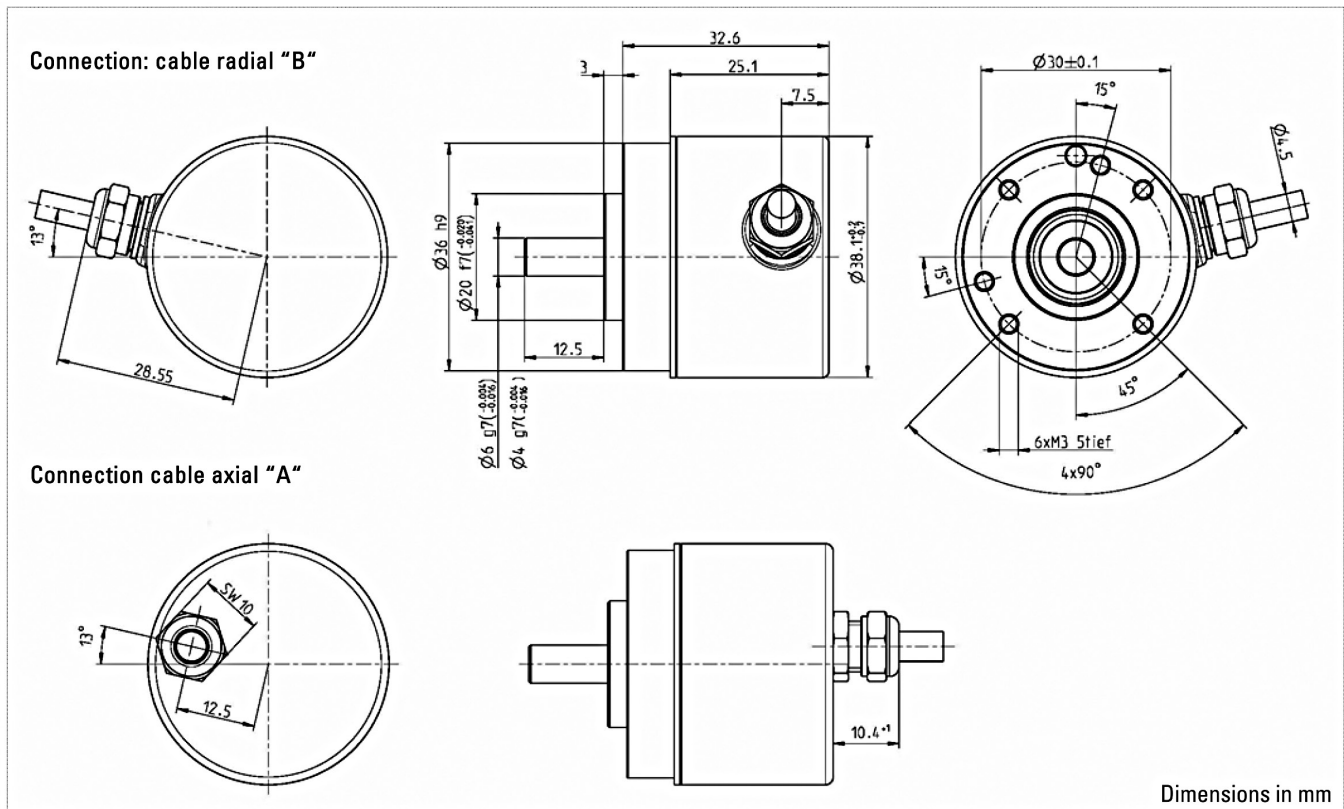
Ordering Information

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

Code 1: Model	Code 2: Resolution	Code 3: Output	Code 4: Flange/Protection/Shaft	Code 5: Interface	Code 6: Termination	Code 7: Cable
AC36	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	R.41	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ordering Information						
Series AC36 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 1212 12 Bit MT, 12 Bit ST 1213 12 Bit MT, 13 Bit ST 1214 12 Bit MT, 14 Bit ST 1217 12 Bit MT, 17 Bit ST 1219 12 Bit MT, 19 Bit ST 1222 12 Bit MT, 22 Bit ST	A 5 VDC E 7-30 VDC	R.41 Pilot Flange, IP64, 6 mm F.1R Spring Tether, Legs Backwards, IP50, 8mm Hubshaft U.1R Spring Tether, Legs Forward, IP50, 8mm Hubshaft	BI BiSS-B BC BiSS-B (+SinCos 1Vpp) BE BiSS-C BV BiSS-C (+SinCos 1Vpp) SB SSI Binary SD SSI Binary (+SinCos 1Vpp) SG SSI Gray SC SSI Gray (+Sin/Cos 1Vpp)	A Cable, axial, 12 pole B Cable, radial, 12 pole	Blank 1.5 M cable DO 3 M cable FO 5 M cable KO 10 M cable PO 15 M cable UO 20 M cable VO 25 M cable

DIMENSIONS

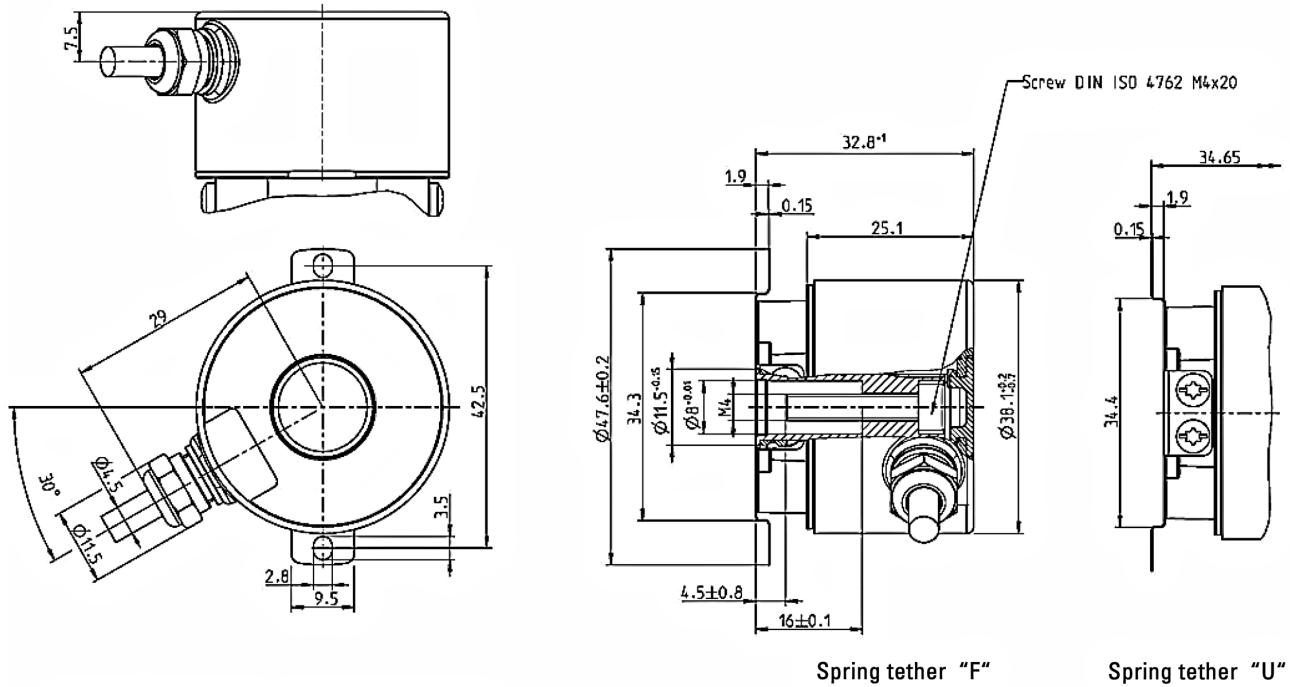
Pilot Flange "R"



DIMENSIONS (Cont.)

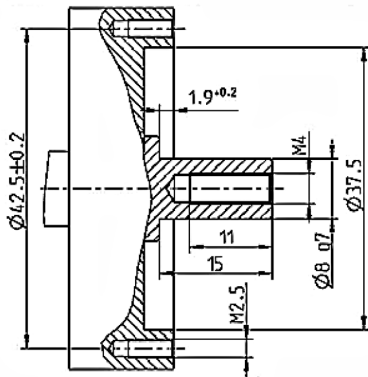
Hubshaft

Connection: cable radial "B"

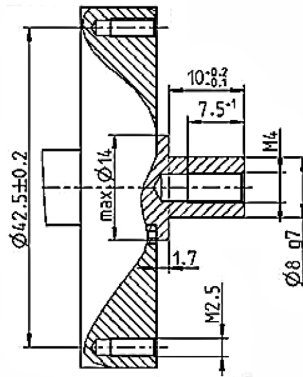


required mating dimensions

Flange "F"



Flange "U"



Dimensions in mm



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