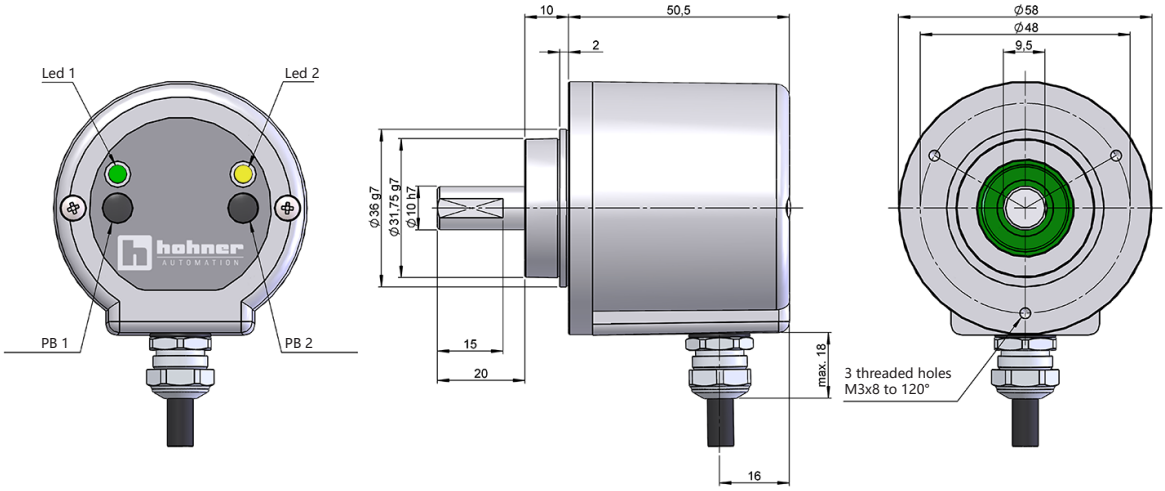
SERIE E58 CM ANA

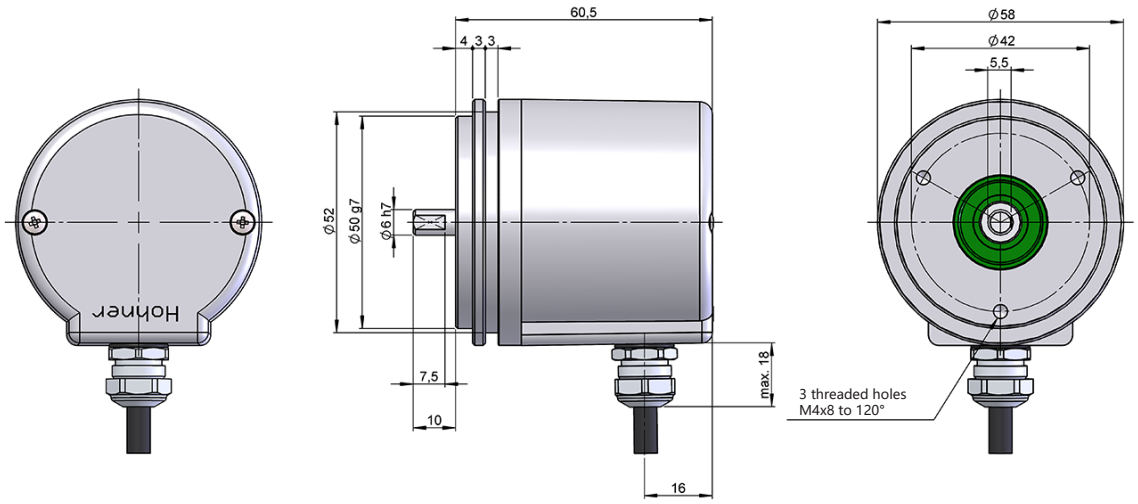
SOLID SHAFT ABSOLUTE MULTITURN ENCODER

- Analog output
- Resolution up to 16 bits
- Measuring range configurable up to 65536 turns
- External diameter 58 mm
- Solid shaft 6, 8, 10 or 12 mm
- Protection class IP65 according to DIN EN 60529
- Limit Switch Function
- Connection by cable (other cable length available) or industrial connector M12

Magnetic Encoder | Absolute Encoder | Analog output | Vibration and shock resistant | Limit Switch | IP65 | Express Delivery



Drawing shaft type 3, mechanical option type 1, connection type 1, measuring range type CB0 or CBL



Drawing shaft type 1, mechanical option type 2, connection type 1, measuring range type CC0, CCL or NC

SERIE E58 CM ANA

SOLID SHAFT ABSOLUTE MULTITURN ENCODER

REFERENCE Reference example: E58CM-ANA-3115-16-CBL / E58CM-ANA-1227-12-NC4096

Serie	Interface	Solid shaft	Mechanical option	Connection	Interface / Supply Voltage	Resolution	Measuring range	Special customer
E58CM -	**ANA -**	☐	☐	☐	☐ -	☐☐ -	☐☐☐	. ☐☐☐☐
	ANA. Analog	**1.** Ø 6 mm **2.** Ø 8 mm **3.** Ø 10 mm **4.** Ø 12 mm	**1.** Clamping **2.** Synchro	**1.** Radial cable **2.** Radial M12 5p	**5.** 0...20 mA, 7-30V (*) **6.** 4...20 mA, 7-30V **7.** 0..10V, 12-30V **8.** 0..5V, 7-30V	**12.** 12 bits **16.** 16 bits	**CB0.** By buttons **CBL.** By buttons + Limit Switch **CC0.** By cable **CCL.** By cable + Limit Switch CONFIGURABLE (1..65536) **NC.** Not configurable (**)	**A01Z.** +105°C (***)

Order your reference Step file 3D

info@encoderhohner.com

service available in 24 h

(*) Only available for measuring range options CB0, CC0 and NC

(**) Measuring range not configurable, indicate number of turns NC + 2^n up to 65536 (1, 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096, 8192, 16384, 32768, 65536). Preset and change of direction can be configured by cable.

(***) Only available for measuring range options CC0, CCL and NC

Factory configuration: Measuring range: 65.536 turns - Direction: CW

MECHANICAL SPECIFICATIONS

Materials	Cover: Aluminium Housing: Aluminium Shaft: Stainless Steel
Bearings	Ballraces
Bearings lifetime	$1x10^{10}$ rev.
Shaft diameter	6, 8, 10 and 12 mm
Maximum number of revolutions permitted mechanically	6000 rpm
Protection against dust and splashes according to DIN EN 60529	IP 65
Rotor inertia moment	10 gcm²
Starting torque at 20°C (68°F)	≤ 0.02 Nm
Maximum load permitted on axial shaft	30 N
Maximum load permitted on radial shaft	40 N
Weight aprox.	0.5 Kg
Operating temperature range	-40°C to +85°C - Standard -40°C to +105°C - Special customer A01Z
Vibration according to DIN EN 60068-2-6	100 m/s² (10Hz...2000Hz)
Shock according to DIN EN 60068-2-27	1000 m/s² (6ms)
Radial connection	2 meters cable or industrial connector M12 (other cable lengths available on order) Female connector not included

SERIE E58 CM ANA

SOLID SHAFT ABSOLUTE MULTITURN ENCODER

ELECTRICAL SPECIFICATIONS

Interface	Analog
Electronic output	0..20mA , 4..20mA, 0..5V, 0..10V
Power supply (VDC)	7-30V, 12-30V
Consumption	≤ 100 mA
Resolution	12 bits or 16 bits
Range	from 22,5º up to 65536 turns
Configurable parameters	Range, Direction and Preset
Rollover mode	Yes
Frequency	100 kHz
Short circuit protection	Yes
Protection polarity inversion	Yes

CONNECTION

	Cable 5x0.14 95.0008051	**Connector** M12 5p CCW
GND	Yellow (YE)	1
+UB	White (WH)	2
SET1 / DIR	Brown (BN)	3
SET2 / PRESET	Green (GN)	4
I_{out} / V_{out}	Grey (GY)	5

MEASURING RANGE CONFIGURATION

CONFIGURABLE BY BUTTONS (OPTIONS CB0 AND CBL)

1. Press PB1 and PB2 together for 5 sec. to enter programming mode.
2. Turn the shaft to the start measuring position.
3. Press PB1 or PB2 for 2 seconds, then the led of the pressed PB stays fixed.
4. Turn the shaft to the end measuring position.
5. Press the other PB not configured for 2 seconds, then the led of the pressed PB stays fixed.

CONFIGURABLE BY CABLE (OPTIONS CC0 AND CCL)

1. Turn the shaft to the start measuring position.
2. Connect SET1 or SET2 with +V for at least one second.
3. Turn the shaft to the end measuring position.
4. Connect the other SET not configured with +V for at least one second.

If the process is not set up correctly, the encoder gives an electronic output of 12 mA in Interface / Supply Voltage options 5 (0..20 mA, 7-30V) and 6 (4..20 mA, 7-30V), or half of maximum voltage in options 7 (0..10 V, 12-30V) and 8 (0..5 V, 7-30V).
In the configuration option with buttons it is also possible to configure the measurement range through the cables.

NOT CONFIGURABLE (OPTION NC)

Direction

1. Set direction before Zero Setting the encoder.

2. If DIR pin is connected to GND or not connected, the encoder has an increasing output signal when the shaft is turned CW.

3. If DIR pin is connected to ≥ 5V up to max supply voltage, the encoder has an increasing output signal when the shaft is turned CCW. DIR pin needs to be always connected to ≥ 5V.

Preset

1. Turn the shaft to the position you want to set to zero. (*)

2. Connect PRESET pin to ≥ 5V up to max supply voltage for at least T=100 ms.

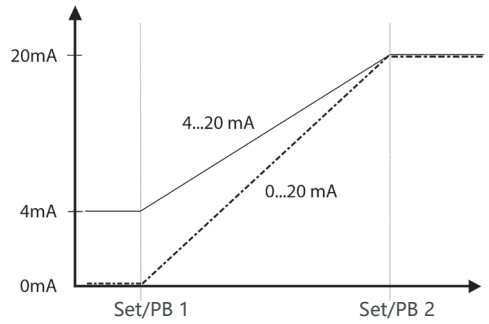
3. Disconnect the PRESET pin, now the encoder is set to zero at the actual shaft position. (*)

4. Make sure that the shaft is not move during the set to zero procedure.

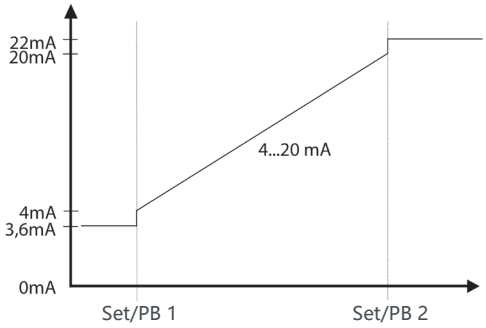
(*) When a Preset is made, if the DIR option is enabled (DIR connected to a ≥5 VDC), the position of the encoder will switch to its maximum value instead of its minimum.

OUTPUT SIGNALS

Configurable version mA (Current) without Limit Switch function

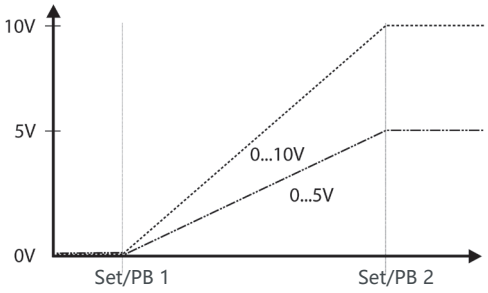


Configurable version mA (Current) with Limit Switch function

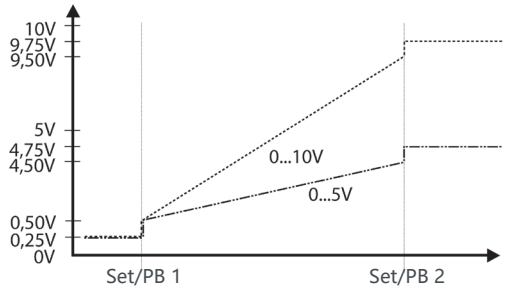


Interface	4...20mA
Low	3.6mA
High	22mA

Configurable version V (Voltage) without Limit Switch function

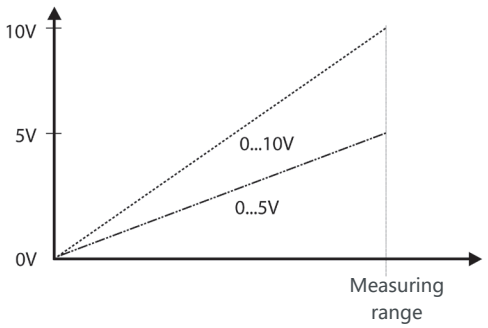


Configurable version V (Voltage) with Limit Switch function

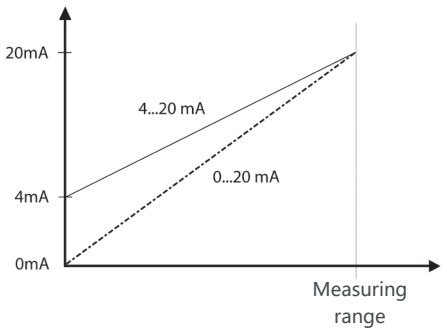


Interface	0...5V	0...10V
Low	0.25V	0.25V
High	4.75V	9.75V

Not configurable version V (Voltage)



Not configurable version mA (Current)

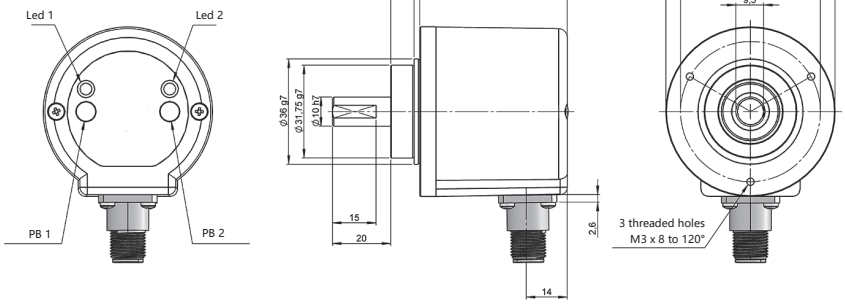


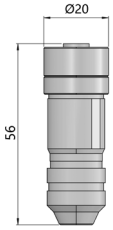
CONNECTION DIMENSIONS

Female connector not included

Connection 2

Radial
M12 5p
male panel
counter clockwise





Female connector
95.0007265

Pre-assembled cable
89.033.01.000.XX
Length in meters