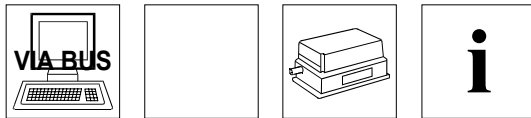


Absolute-Encoder CE-58-M AS-i



- **Small and Compact**
- **Type: Multi-Turn, Solid Shaft**
- **AS-i (Actuator-Sensor-Interface)**
- **Fast Signal Processing**
- **Parametrizable via AS-i Bus**
- **Standard Interchangeable Mounting Flanges**

5

Electrical Data

Encoder Capacity	max. 28 Bit (Conditioned to the controller: Max. output limited to 16 bits!)
* Steps / Revolution	8192 Steps / Revolution (delivery setting of the max. value)
* Number of Revolutions	max. 32768 Revolutions (delivery setting of the max. value)
Supply Voltage and Data Transmission	29,5 - 31,6 VDC, guaranteed by the AS-i controller
Current Consumption	approx. 100 mA
Parameter Setting and Addressing via AS-I Bus	Actuator Sensor Interface according to EN 50 295
* Output Code	Binary, Gray
* Counting Direction	increasing or decreasing
Topology	Line- and tree-structure
Transmission Rate	gross: 167 kbps, net: 53.3 kbps
Number of Slaves	31 slaves, each with 4 slaves/encoder, thus 7 encoders are possible
Cable Length in the Bus	max. 100 m, without repeater
Medium	unscreened two-wire line
Cycle Time	max. 5 ms, with 31 slaves
Bus Access Method	Master-Slave (bi-directional)
Other Functions	
Temporary Storage of the Position Values	with/without acknowledgement for safeguarding of the data consistency
Zero Adjustment	Set encoder value to "0"
Set Encoder to 1/4 of the Resolution	1/4 * company-intern-specified max. value (step/revolution)
Address Pre-Allocation at Delivery	Slave A-D = 1-4, Carrying out new addressing after scheme n, n+1, n+2 etc.
Pin Assignment	upon request
* Parameterizable Parameter	

Environmental Data

Electromagnetic compatibility (EMC)	EN 61000-4-2 (IEC-801-2) / EN 61000-4-4 (IEC-801-4)
Operating Temperature	-20 to +70°C
Storage Temperature	-30 to +80°C
Relative Humidity	98 % (non condensing)
* Protection Class	IP 67 (DIN 40 050)
* Valid for the encoder with screwed-on mating connector and screwed-together cable gland.	

Mechanical Data

Maximum Rotational Speed	12.000 min ⁻¹
Maximum Load on Shaft	10 N axial, 20 N radial (at end of shaft)
Lifetime on Bearings	min. 3,9 x 10 ¹⁰ revolutions at:
- Operational Speed	6.000 min ⁻¹
- Operating Temperature	60°C
Weight	approx. 0,3 kg
Maximum Angular Acceleration	≤ 10 ⁴ rad/s ²
Momentum of Inertia	approx. 2,5 x 10 ⁻⁶ kg m ²
Startup Momentum at 20°C (68°F)	approx. 2 Ncm
Vibration (Sine, 59-2000 Hz) according to DIN IEC 68-2-6	≤ 100 m/s ² (10g)
Shock (Half-Sine, 11ms) according to DIN IEC 68-2-27	≤ 1000 m/s ² (100g)
Standard Connection	4 pin M12 Bullet-Connector, radial
Further Types of Connections / Connector Types	Upon Request

Dimensional Drawing

