

Absolute-Encoder AES58 - SSI

Ref.: K-AES58-SSI-1

18.11.2013

010102005802010203

Advantages

- _ Customer-specific solutions
- _ Ex-Protection Zone 2/22
- _ Flexible programming
- _ Further interfaces available
- _ Modular mechanical design
- _ Modular product line
- _ Short lead times



General Data

Nominal voltage	
- Specific value	24 VDC
- Limit values, min/max	11/27 VDC
Power consumption	<= 3 W
Device design	
- Type	Single-/Multi-Turn
Total resolution	<= 33 Bit
Number of steps per revolution	<= 32768
Number of revolutions	<= 256000
SSI - Interface	
- SSI-Clock input	Optocoupler
- SSI-Data output	RS-422, 2-wire
- SSI-Clock frequency	80...1000 kHz
- SSI-Mono time, typically	20 µs
Incremental - Interface	
- Equipment	Optional interface
- Incremental signals, square	K1± K2±
- Impulses, square wave	1024 or 2048
- Output driver, TTL	RS-422, 5 VDC
Parameter/Function, changeable	Resolution
	Output code
	Output format

Subject to change.

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General Data continuation

	Movement status signal
	Limit switch
	Error signal
	Preset parameter
	Parity
	Direction signal
	Overspeed
	Counting direction
Type of parametrization	programmable
Prgramming - Tool	TR-Soft: TRWinProg
External inputs	
- F/R	Count direction
- Preset	electronic adjustment
- Logic level	"0" < +2V, "1" = Supply
Maximum Speed, mechanically	<= 4000 1/min
Shaft load, axial/radial	Own mass
Bearing life time	>= 3.9E+10 revolutions
Bearing life time - Parameter	
- Speed	6000 1/min
- Operating temperature	60 °C
Angular acceleration	<= 10E+4 rad/s ²
Moment of inertia, typically	2.5E-6 kg m ²
Start-up torque, 20 °C	2 Ncm
Mass, typically	0.3...0.5 kg

Environmental conditions

Vibration	
- Specific value	<= 100 m/s ²
- Sine	50...2000 Hz
Shock	
- Specific value	<= 1000 m/s ²
- Half sine	11 ms
Immunity to disturbance	DIN EN 61000-6-2
Transient emissions	DIN EN 61000-6-3
Working temperature	
- Standard	-20...+60 °C

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Environmental conditions continuation

Storage temperature, dry	-30...+80 °C
Relative humidity	98 %, non condensing
Protection class	
- Standard	IP64
- Note	observe Ex User manual
Relev. Ex Directive/Standards	
- Directive 94/9/EG (ATEX)	Intended use
- EN 60079-0	General requirements
- DIN EN 60079-14	Installation, erection
- EN 60079-15	Equipment protection "n"
- EN 60079-31	Dust ignition protection "t"
- DIN EN 60529	Degrees of protection, IP code
Ex protection - Data, Gas	
- Device group /-category	II 3G (Gc, Zone 2)
- Ignition protection type	nAc (non-sparking equipment)
- Group	IIC (Hydrogen)
- Temperature, surface	T6 (<= 85 °C)
- Special conditions	yes (X), observe Ex manual
Ex protection - Data, Dust	
- Device group /-category	II 3D (Dc, Zone 22)
- Ignition protection type	tc (Protection by enclosure)
- Group	IIIC (conductive dust)
- Temperature, surface	T80°C
- Special conditions	yes (X), observe Ex manual

Subject to change.

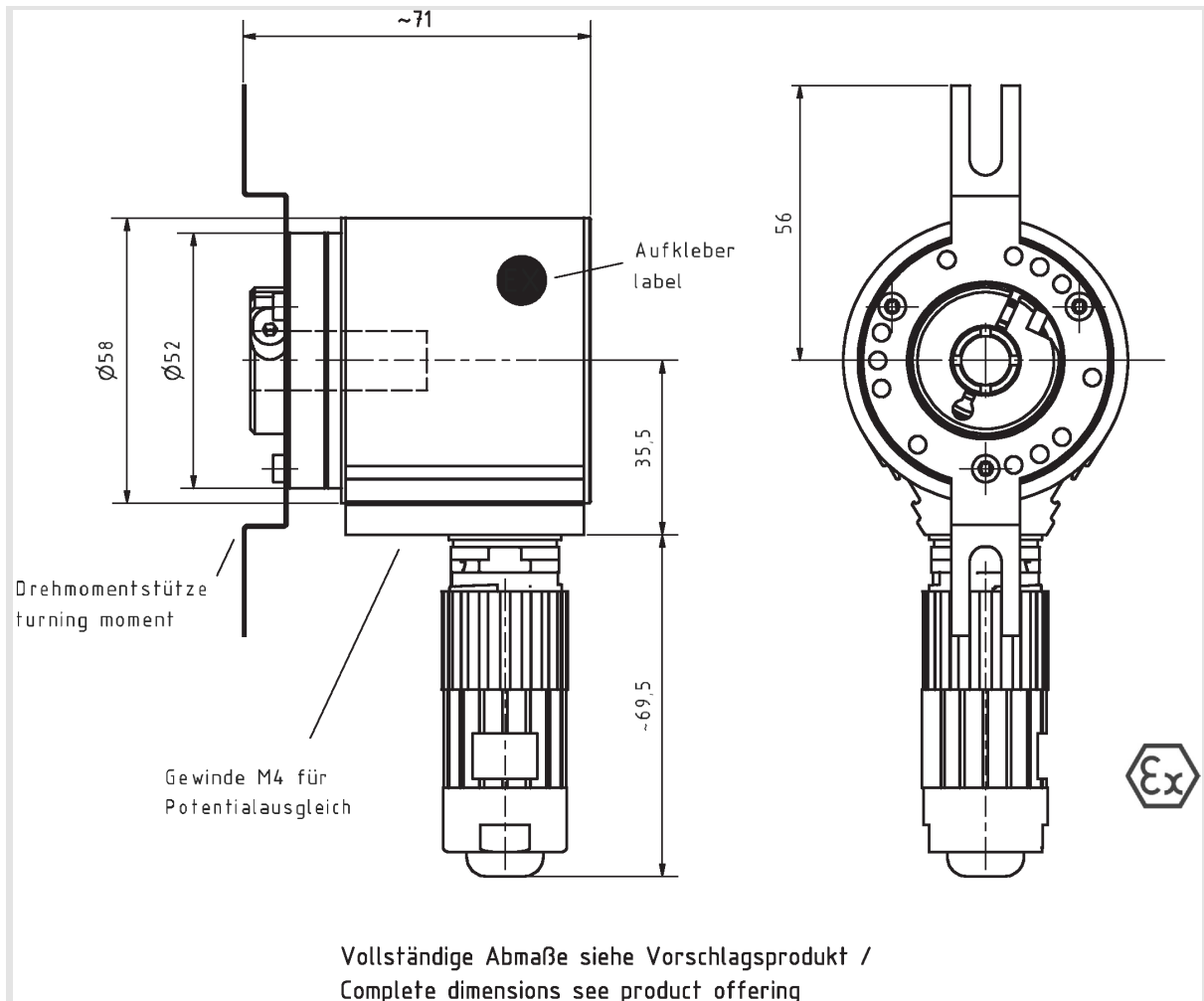
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Dimensional drawing



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