

Vert-X 32E - 8 ... 35V / CANopen / Single**32E5b836133999****Technical datas**

Mechanical version	Magnetic actuator type 5
Mounting hole	Through-hole $\varnothing$ 4.4 mm with counter bore $\varnothing$ 8 mm/label side
Sensor principle	MH-C2
Electrical angle	Electrical angle 360°
Power supply voltage	24 VDC
Output signal	CANopen Encoder Profile 406 (C2)
CAN characteristics	CAN high In; CAN high Out; CAN low In; CAN low Out
Electrical connection	Special cable
Length of cable	Special length

Electrical Datas

Measuring range	°	0...360
Indep. linearity (typ.)	% of measuring range	± 0.3
Max. hysteresis	°	0.1
Resolution	bit	16
Max. repeatability	°	0.1
Sample rate	kHz	0.5
Max. temperature coefficient of output signal	ppm/K	25
MTTFd / MTBF		upon request
Power supply voltage	VDC	8 ... 35
Current consumption without bus load (typ.), per channel	mA	30
Reverse polarity protection of power supply		yes
Electrical connection		Round cable, s
Cross section of single wires	mm ²	0.34 (AWG 22)
Bus interface		ISO/DIS 11898-2
CANopen communication according to CiA		Standard DS-301 Rev. 4.02
Device profile		DS-406, Rev. 3.1, Encoder class C2
Default node ID	16 (programmable 1 to 127)	
Default bitrate	kBit/s	125

Mechanical Datas

Mechanical range	°	360 (continuous)
Protection rating		IP68/IP69K
Min. life	movements	no limitation
Operating & storage temperature	°C	-40...+85
EN 60068-2-6, vibration (Amax = 0.75 mm, f = 5–2,000 Hz)	g	20
EN 60068-2-27, shock	g	50

Standards

EN 55011, Emission (Cl. B)		
EN 61000-4-2, ESD (contact discharge / air discharge)	kV	± 4 / ± 8
EN 61000-4-3, Immision HF radiated (80–1000 MHz/1.4–2.7 GHz)	V/m	30
EN 61000-4-4, Burst (on all lines)	kV	± 1
EN 61000-4-5, Surge (lines to ground)	kV	± 1
EN 61000-4-6, Immision HF conducted (0.15–80 MHz)	Vemf	10
EN 61000-4-8, Immision magnetic field (50 Hz)	A/m	300

Features

- CiA approved
- Non-contacting measuring method
- High protection rating IP68/IP69K
- Very long life
- High measurement accuracy
- Can be used in harsh environments (humidity, dampness, dust, vibrations, etc.)
- Magnetic loss detection (with safety flag)

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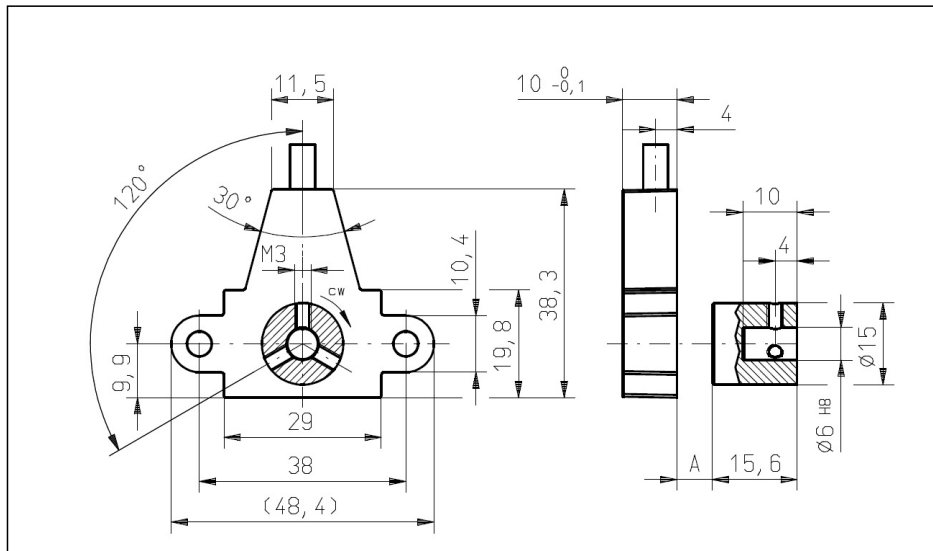
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Insulation resistance (500 VDC, 1 bar, 2s)	GOhm	20
Dielectric strength (VAC, 50 Hz, 1 min, 1 bar)	kV	1

Options

Custom modification of housing
Custom cable
Custom magnetic actuator
Sample rate in fast mode
Special electrical angle between 30 and 360° (ex factory)
Full redundancy possible
Extended operating range, axial (without safety flag)



Operating range/Air gap (A) Standard with Safety Flag

- 1.4 ... 6.7mm

Extended without Safety Flag (Optional)

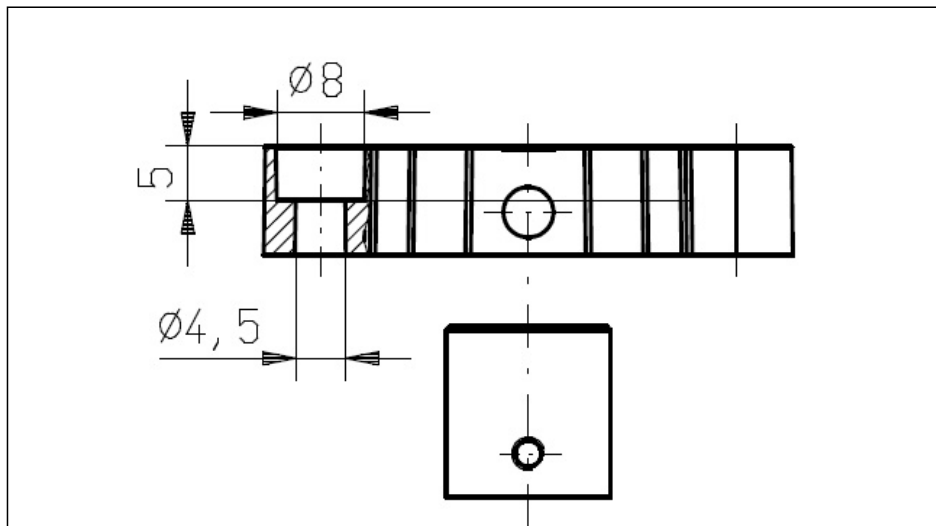
- 0 ... 10.4mm

Features Safety Flag

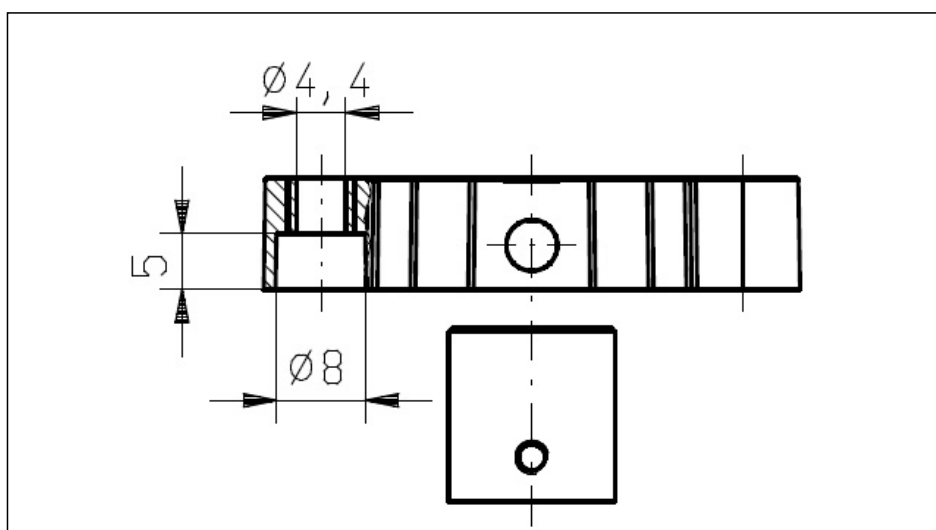
- Detection of magnetic loss
- System shut-down in case of magnetic actuator out of valid operating range
- Recommended for safety relevant applications

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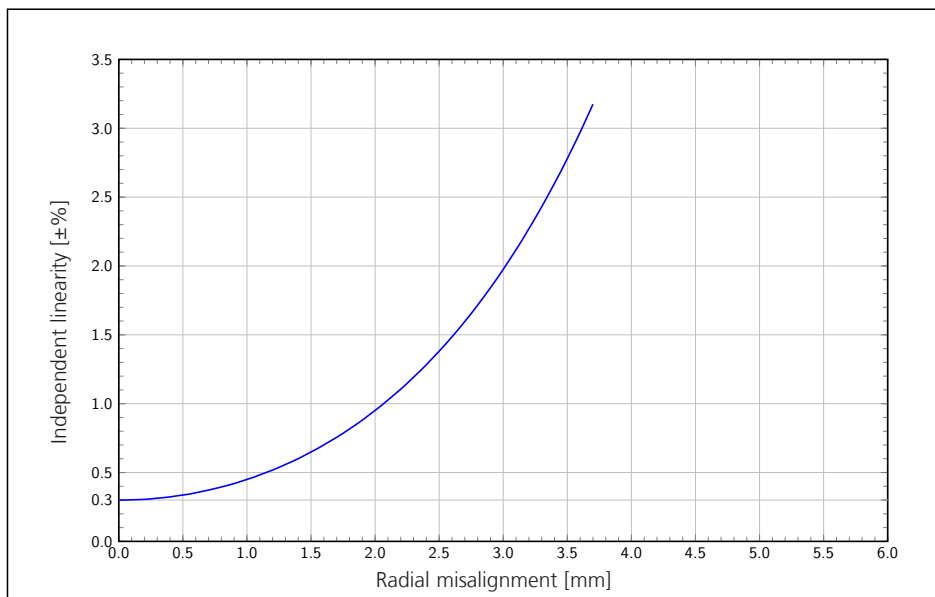
Vert-X 32E5b



Vert-X 32E5d

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Indep. linearity with radial misalignment (@360°)