

Vert-X 32E - 11 ... 35V / 0.1 - 10V / Single**32E5b836112699****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	0.1–10 V
Output characteristics	Single, positive gradient CCW
Electrical connection	Round cable, 6-pole
Length of cable	Special length

*Switching outputs / Please define number (max. 127), position and width of pulses.

Electrical Datas

Measuring range	°	0...360
Indep. linearity (typ.)	% of measuring range	$\pm$ 0.3
Max. hysteresis	°	0.1
Resolution	bit	14
Max. repeatability	°	0.1
Sample rate fast mode	kHz	(2)
Sample rate slow mode	kHz	0.5
System propagation delay fast mode	μ s	(800)
System propagation delay slow mode	μ s	2500
Max. temperature coefficient of output signal	ppm/K	100
MTTFd / MTBF		upon request
Power supply voltage	VDC	11 ... 35
Current consumption without load (typ.) fast mode, per channel	mA	(20)
Current consumption without load (typ.) slow mode, per channel	mA	15
Min. ohmic load at output	kOhm	10
Max. capacitive load at output	nF	100
Reverse polarity protection of power supply		yes
Electrical connection		Round cable, 3-pole
Cross section of single wires	mm ²	0.56 (AWG20)
Redundancy possible		no

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	$\pm$ 4 / $\pm$ 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	$\pm$ 1

Features

- 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)

Features MH-C2

- Resolution of 14bit
- Index point(s), sense of rotation and angle settable resp. programmable by customer (optional)

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EN 61000-4-5, Surge (lines to ground)	kV	±1
EN 61000-4-6, Immision HF conducted (0.15–80 MHz)	Vernf	10
EN 61000-4-8, Immision magnetic field (50 Hz)	A/m	300
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

Switch functions TTL (max. 2)

Special characteristic curve

Special electrical angle between 30 and 360° (ex factory)

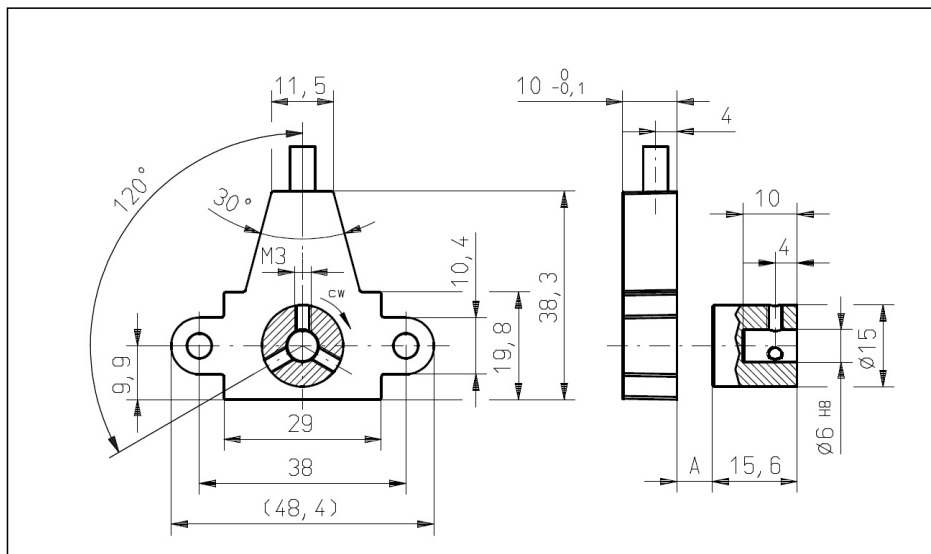
Electrical angle programmable (software)

Start and end point settable (additional wires)

Direction of rotation CW/CCW settable/programmable (additional wires or software)

Index point settable/programmable (additional wires or software)

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)**

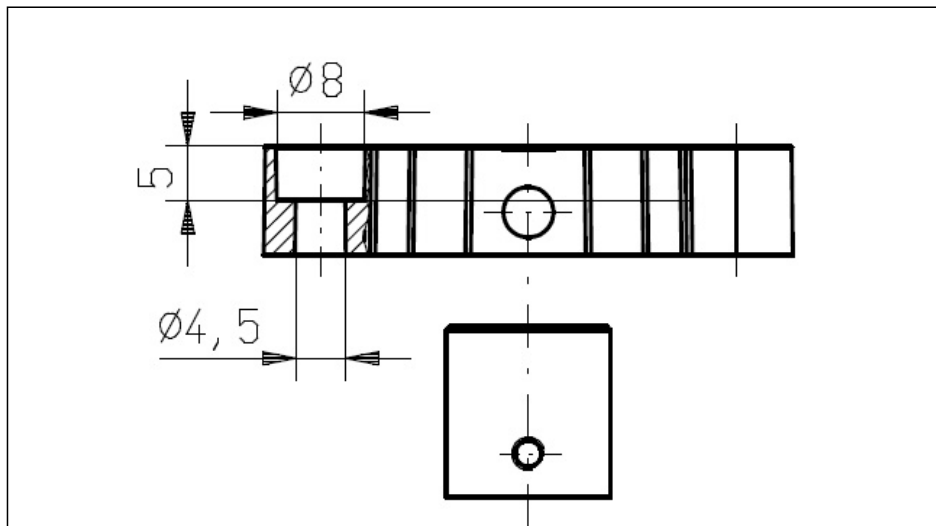
- 0 ... 10.4mm

Features Safety Flag

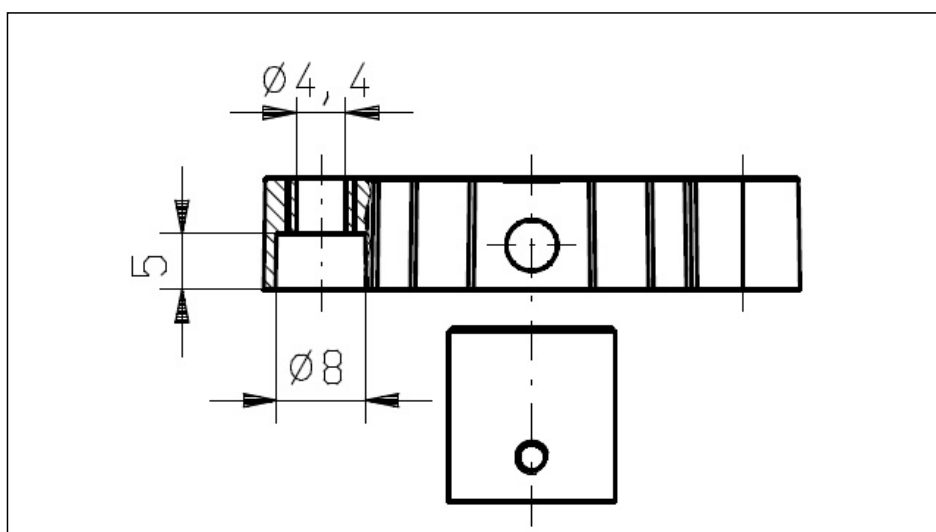
- Detection of magnetic loss
- System shut-down in case of magnetic actuator out of valid operating range
- Recommended for safety relevant applications

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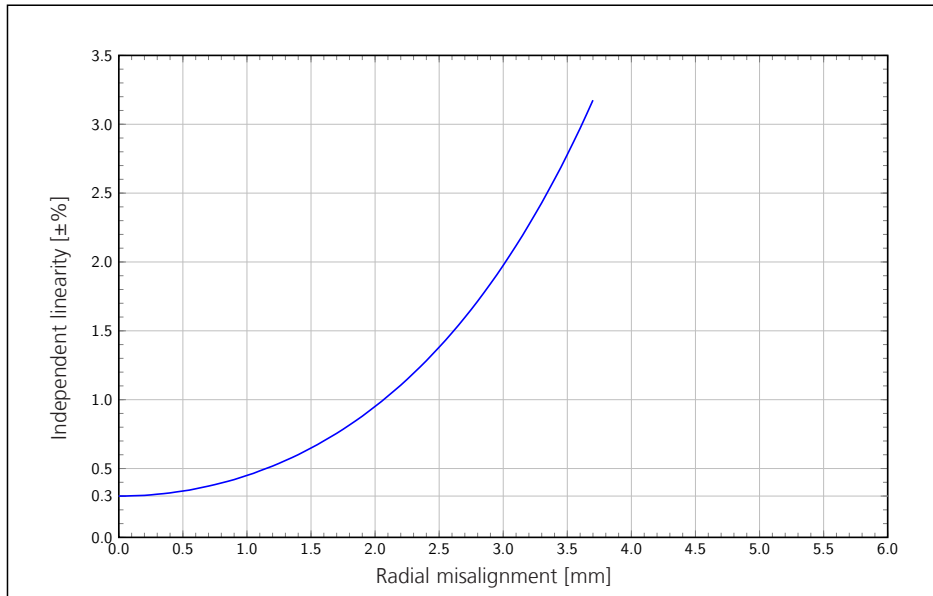
Vert-X 32E5b



Vert-X 32E5d

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Indep. linearity with radial misalignment (@360°)