

**Vert-X 32E - 8 ... 35V / CAN J1939 / Single****32E5d8361B5802****Technical datas**

|                       |                                                                                               |
|-----------------------|-----------------------------------------------------------------------------------------------|
| Mechanical version    | Magnetic actuator type 5                                                                      |
| Mounting hole         | Through-hole $\varnothing$ 4.4 mm with counter bore $\varnothing$ 8 mm/magnetic actuator side |
| Sensor principle      | MH-C2                                                                                         |
| Electrical angle      | Electrical angle 360°                                                                         |
| Power supply voltage  | 24 VDC                                                                                        |
| Output signal         | CAN SAE J1939                                                                                 |
| CAN characteristics   | CAN high; CAN low                                                                             |
| Electrical connection | Round cable, 4-pole                                                                           |
| Length of cable       | 1.0 m (cable)                                                                                 |

**Electrical Datas**

|                                                          |                 |                                                 |
|----------------------------------------------------------|-----------------|-------------------------------------------------|
| Measuring range                                          | °               | 0...360                                         |
| Resolution                                               | bit             | 16                                              |
| 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 <sup>2</sup> | 0.34 (AWG 22)                                   |
| Bus interface                                            |                 | ISO/DIS 11898-6                                 |
| CANopen communication according to CiA                   |                 | Standard J1939_201308<br>/Standard J1939_201106 |
| Default bitrate                                          | kBit/s          | 250                                             |
| Default address (preferred)                              |                 | 128 (any arbitrary<br>address possible)         |

**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   | $\pm 1$           |
| EN 61000-4-5, Surge (lines to ground)                        | kV   | $\pm 1$           |
| 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               |
| Insulation resistance (500 VDC, 1 bar, 2s)                   | GOhm | 20                |
| Dielectric strength (VAC, 50 Hz, 1 min, 1 bar)               | kV   | 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)

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## Options

Custom modification of housing

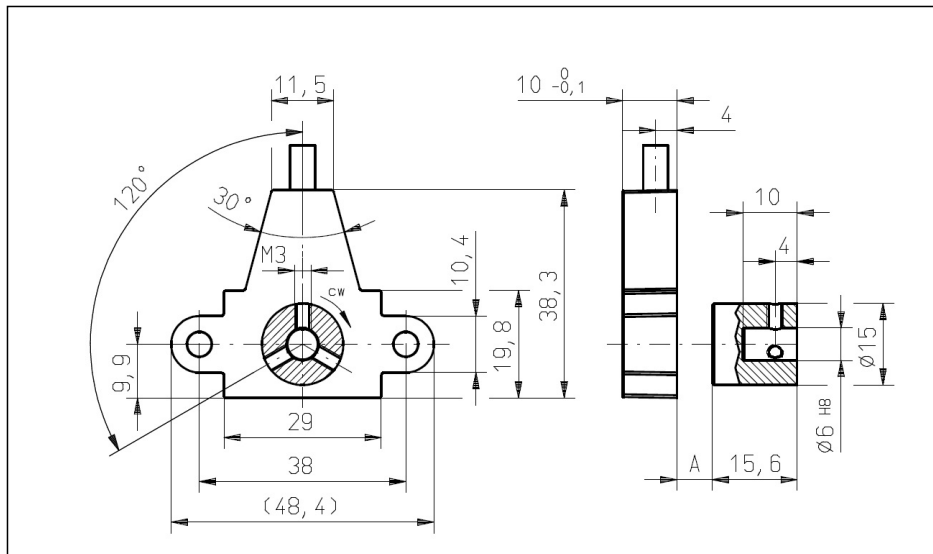
Custom cable

Custom magnetic actuator

Full redundancy possible

Custom bitrate (10; 20; 50; 100; 250; 500; 800; 1,000 kBit/s)

Extended operating range, axial (without safety flag)



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

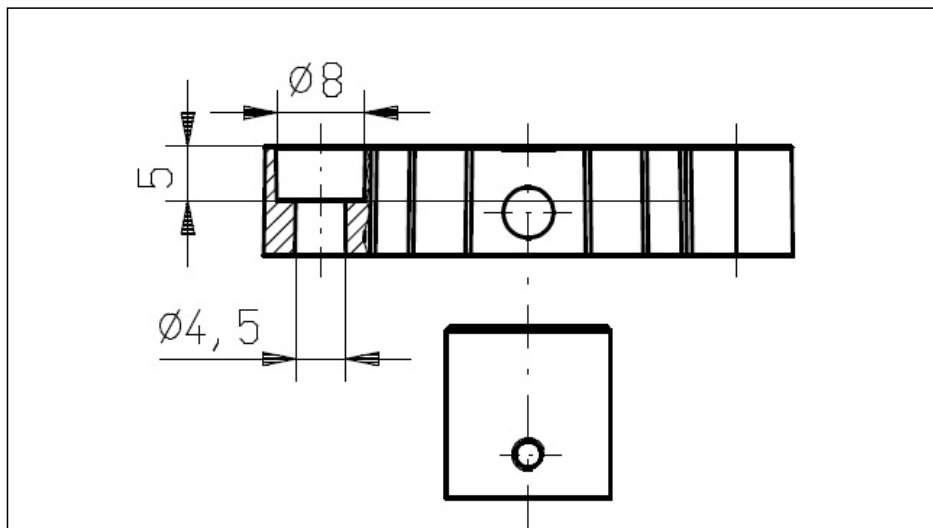
- 1.4 ... 6.7mm

## 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



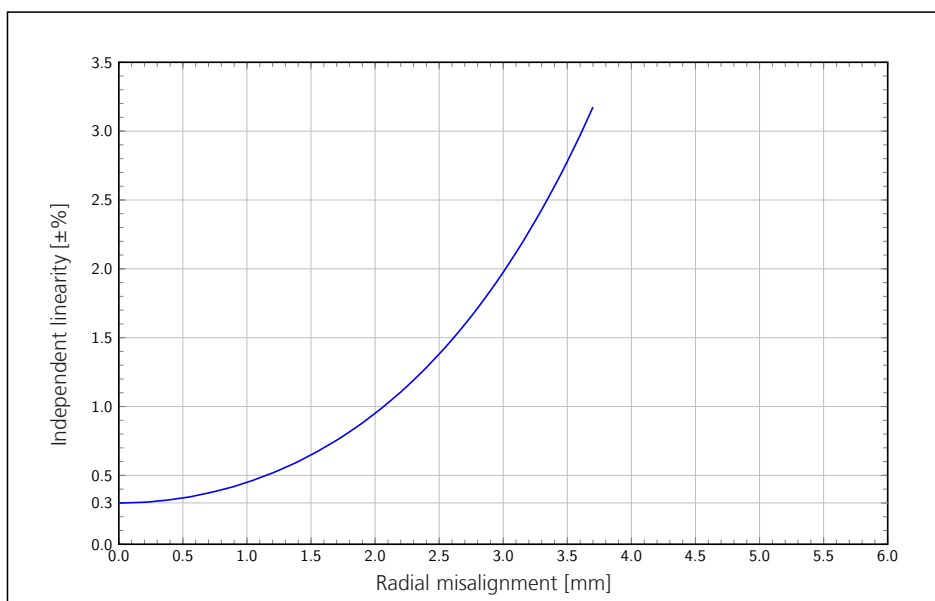
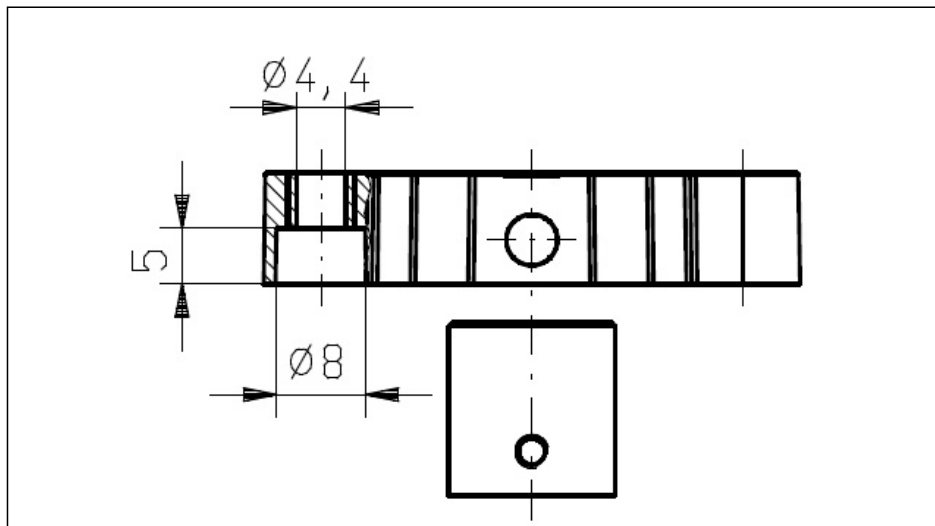
## Vert-X 32E5b

# Vert-X 32E - 8 ... 35V / CAN J1939 / Single

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Vert-X 32E5d



Indep. linearity with radial misalignment (@360°)