

Sensor principle		MT-E
Electrical data		
Measuring range	turns	2^0 - 2^{16} (programmable by CAN)
Indep. linearity (@360°)	%	±0.1
Max. hysteresis	°	0.1
Resolution single-turn	bit	16 (default)
Resolution multi-turn	bit	16 (default)
Max. repeatability	°	0.1
Sample rate	kHz	5
Max. temperature coefficient of the output signal	ppm/K	25
Power supply voltage	VDC	8 ... 35
Current consumption without bus load (typ.)	mA	30
Reverse polarity protection of power supply		yes
Electrical connection		Connector M12-m
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 ... 127)
Default bitrate	kBit/s	125 (programmable by CAN)
Mechanical data		
Mechanical range	°	360 (continuous)
Protection class		IP68
Max. starting torque at specified protection class	Ncm	6
Max. rotating speed	rpm	3000
Min. life	movements	360 Mio.
Max. permitted axial shaft load	N	250
Max. permitted radial shaft load	N	100
Operating & storage temperature	°C	-40 ... +85
EN 60068-2-6 Vibration (Amax = 0.75mm, f = 5…2000Hz)	g	20
EN 60068-2-27 Shock	g	50
Standards		
EN 55022 classe B, Emission radiated (30...230MHz)	dB(µV/m)	max. 30
EN 55022 classe B, Emission radiated (230...1000MHz)	dB(µV/m)	max. 37
EN 55022 classe B, Emission conducted (0.15...0.5MHz)	dB(µV)	max. 56...46
EN 55022 classe B, Emission conducted (0.5...5MHz)	dB(µV)	max. 46
EN 55022 classe B, Emission conducted (5...30MHz)	dB(µV)	max. 50
EN 61000-4-2, ESD (contact discharge / air discharge)	kV	±4 / ±8
EN 61000-4-3, Immission HF radiated (80...1000MHz/1.4...2.7GHz)	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, Immission HF conducted (0.15...80MHz)	Vemk	10
EN 61000-4-8, Immission magnetic field (50Hz)	A/m	10000
EN 60393-1 Insulation resistance (500VDC, 1bar, 2s)	GOhm	20
EN 60393-1 Dielectric strength (VAC, 50Hz, 1min, 1bar)	kV	1

Vert-X 37MT - 24V / CANopen

Applications

- Heavy load transporter
- Crane position monitoring

Features

- Battery- and gearless absolute multiturn sensor
- Very robust design
- Contactless measuring method
- Very long life
- High accuracy of measurement
- Applications under adverse ambient conditions possible (humidity, dampness, dust, vibrations etc.)

Errors and omissions excepted. Subject to change without notice. / State: 21.06.16

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Vert-X 37MT - 24V / CANopen

Ordering code

CAN characteristics

CAN-High ; CAN-Low ; RCAN	Optional	4
CAN-High ; CAN-Low	Standard	5
Special version	Optional	9

Output signal

CANopen Encoder Profile 406 (C2)	Standard	3

Power supply voltage

24VDC	Standard	1

Electrical connection

S	Standard	Connector

Definition of the connector

15	Standard	1x Connector 5pole

Vert-X	3	7	6	2		4	1	6		1	3	5		S	1	5

Resolution Multiturn / number of turns

xx	Optional	xxbit = 2xx turns
08	Optional	8bit = 256 turns
12	Optional	12bit = 4096 turns
16	Standard	16bit = 65536 turns
99	Optional	Special resolution

Sensor principle

4	MT-E

Mechanical version

3762	Standard	Servo mount size 13 ; steel ; 10 mm shaft slotted with D-shape ; IP68
3799	Optional	Special housing ; special shaft

	MT-E
Custom shaft design	X
Custom modification of the housing	X
Custom electrical connection	X
CAN integrated bus termination resistor (120Ω) / RCAN	X
Custom bitrate (10 ; 20 ; 50 ; 100 ; 250 ; 500 ; 800 ; 1000 kBit/s)	X

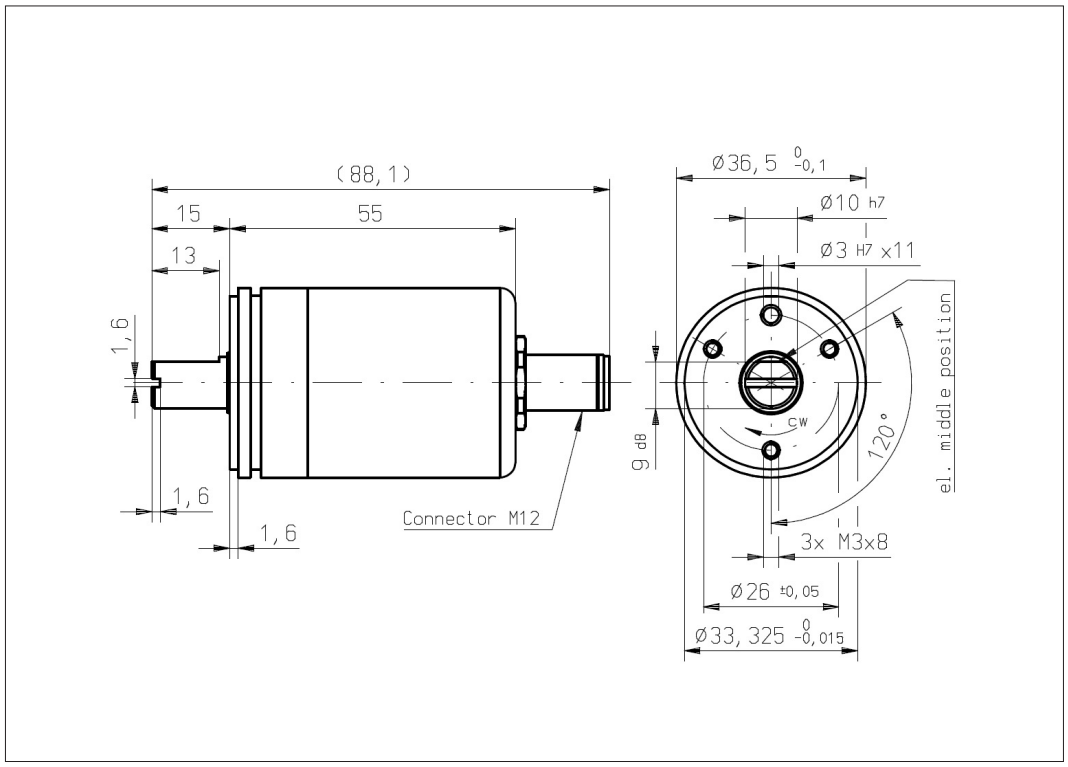
Options (on request)

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Vert-X 37MT

Accessories (incl.)

- 3x Fixation clamp
- 3x Slotted cylinder head screw M3x8

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