

Incremental encoder with complementary signals and marker pulse

- ▶ Intrinsic safety design
- ▶  II 1 G EEx ia IIC T4
- ▶ IP 65, encapsulation class
- ▶ Free choice of line counts up to 2500



ATEX 632

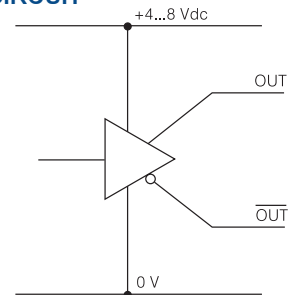
ELECTRICAL SPECIFICATION

Supply voltage +EV	4-8V
	Polarity protected
Current consumption at no load	15mA @ 5V Max 40mA
Line counts (free choice)	1...2500
Measuring steps	Max 10 000/r
Accuracy	
Dividing error	$\pm 50^\circ$ el
Channel separation	$90^\circ \pm 25^\circ$ el
Outputs	TTL
Load max	± 20 mA
Cable length max	10m Included in Ci
U_{high} (at 10mA load)	$> +EV - 1,6V$
U_{low} (at 10mA load)	$< 0,4V$
Frequency range	0...100kHz

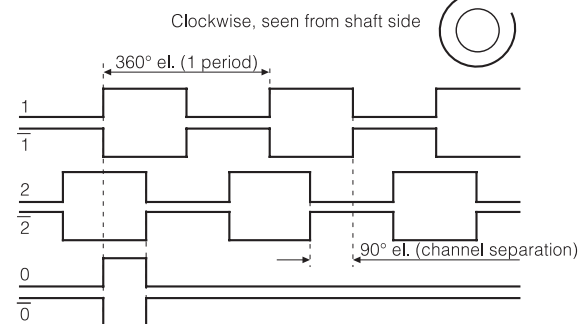
Conditions for Ex certificate

Certificate according to	 II 1 G EEx ia IIC T4
Certificate number	SP03ATEX3613X
U_i Max input voltage	10,0 V
I_i Max input current	400 mA
P_i Max input power	1,0 W
C_i Internal capacitance	120 nF
L_i Internal Inductance	12 μ H
T_{amb} Ambient temperature	-20°C ... +60°C
Maximum shaft load, axial:	50N
Maximum shaft load, radial:	60N
Maximum shaft speed:	6000rpm
Replacement interval:	50000 h / 6×10^9 revolutions (at 2000rpm continuous op.)
Encoder casing must be connected to ground	

OUTPUT CIRCUIT

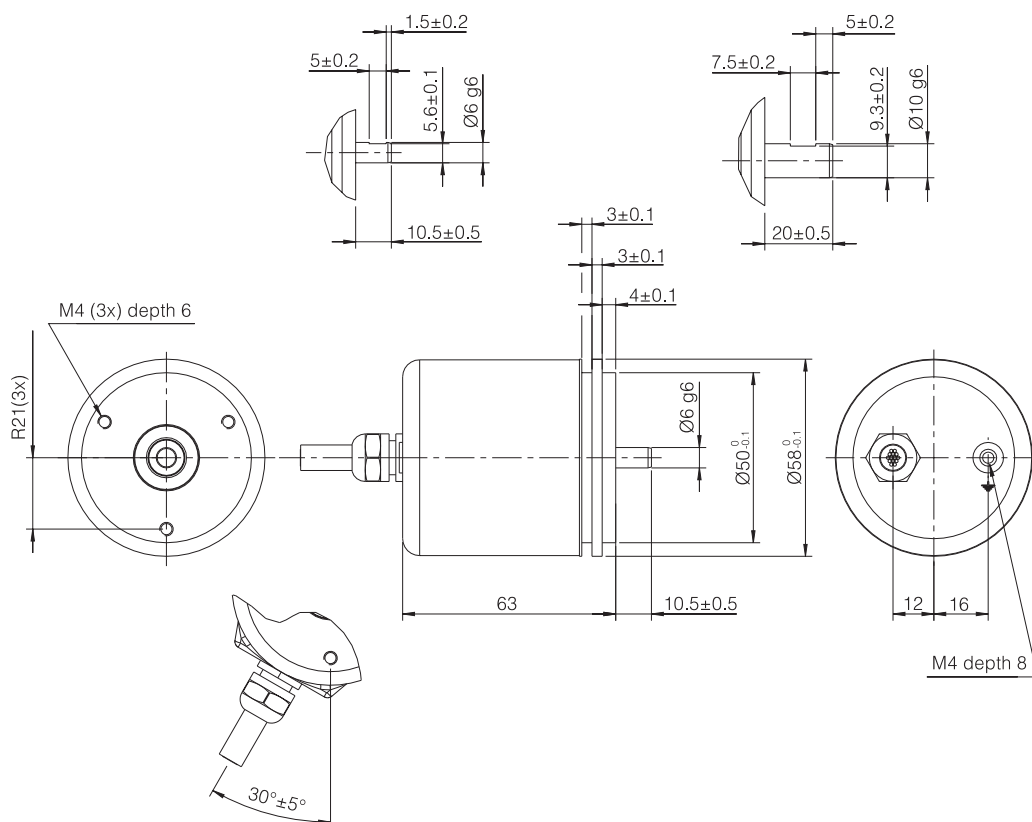


OUTPUT SIGNALS



CONNECTION

Function	Colour
1	Green
1-bar	White
2	Black
2-bar	Yellow
+ E Volt	Red
0 Volt	Blue
0	Brown
0-bar	Violet



MECHANICAL SPECIFICATION

Shaft, Stainless steel	$\varnothing$ 6mm, 10mm
Moment of inertia	$2,6 \times 10^{-6} \text{ kgm}^2$
Load max	
Radial	60N
Axial	50N
Speed max	6000 rpm
Code disc	Standard
Temperature	
Operating	-20°C ... +60°C
Storage	-20°C ... +60°C
Housing	Aluminum, Nickel surface 20 μ m
Weight	Approx. 300g
Protection class	IP 65 according to IEC 529
Vibration	<100m/s ² (50...2000 Hz)
Shock	<1000m/s ² (11ms)
Cable	6x0,25mm ² 2x0,35mm ² PVC

ORDERING INFORMATION

Available models

632 900170
6 mm shaft without face, Cable axial, 1 - 2500 ppr

632 900171
6 mm shaft with face, Cable axial, 1 - 2500 ppr

632 900172
10 mm shaft with face, Cable axial, 1 - 2500 ppr

632 900175
10 mm shaft with face, Cable radial, 1 - 2500 ppr