


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**



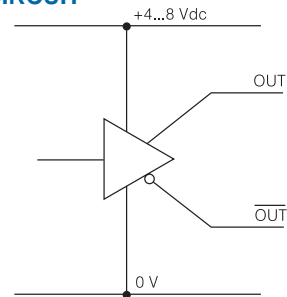
ELECTRICAL SPECIFICATION

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	± 50° el
Channel separation	90° ± 25° el
Outputs	TTL
Load max	± 20mA
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

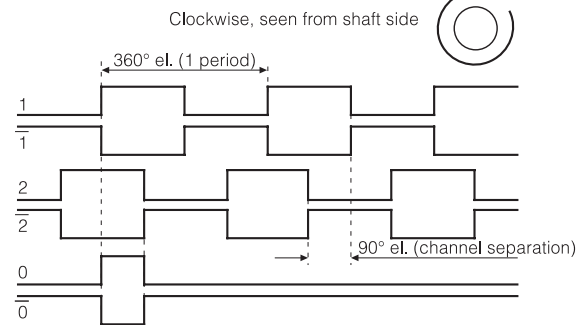
Conditions for Ex certificate

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 µH
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 / 6x10 ⁹ revolutions (at 2000rpm continuous op.)
Encoder casing must be connected to ground	

OUTPUT CIRCUIT

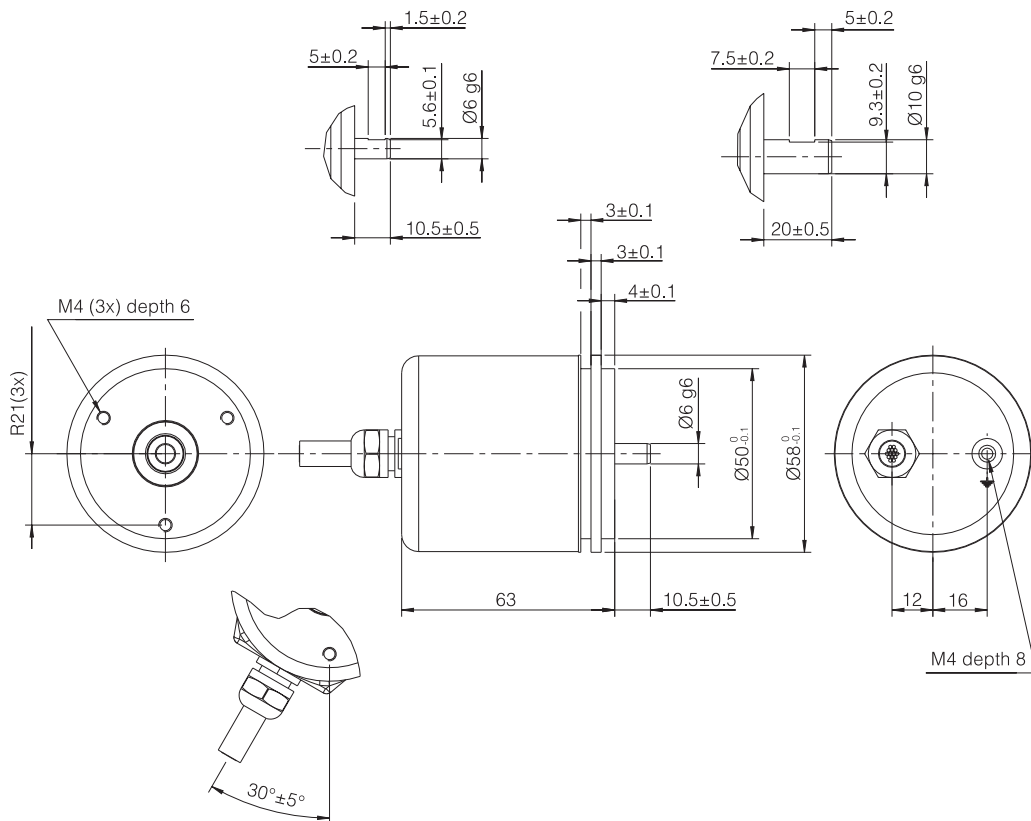


OUTPUT SIGNALS



CONNECTION

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



MECHANICAL SPECIFICATION

Shaft, Stainless steel	Ø 6mm, 10mm
Moment of inertia	2,6 x 10 ⁻⁶ 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 20µm
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