



## Absolute singleturn encoders

- ▶ 10-bit
- ▶ Binary or Gray-code possible with Excess-code
- ▶ Hold-function
- ▶ Change of counting direction via input signal
- ▶ Parallel output
- ▶ 9...30 Vdc / 5 Vdc



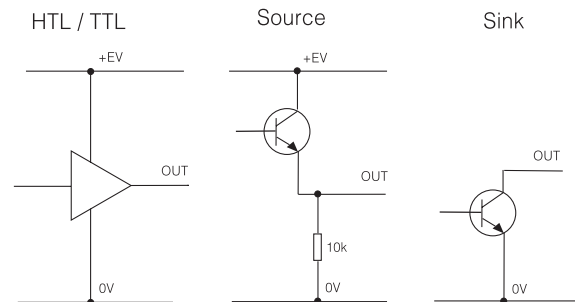
## ELECTRICAL SPECIFICATION

Supply voltage +EV	9-30V	5V ±10%
	Polarity protected	---
Current consumption at no load, Sink	25mA @ 24V Max 70mA	50mA Max 90mA
Source	50mA @ 24V Max 100mA	---
HTL, TTL	75mA @ 24V Max 120mA	100mA Max 200mA
Resolution	Max 10 Bit	
Accuracy	± ½ LSB	
Outputs, Parallel	Sink, Source	HTL, TTL
Code	Gray, Excess	Gray, Binary, Excess
	---	Short circuit prot.
Load max	50mA	± 20mA
U <sub>high</sub> (at 10mA load)	> +EV - 4,0V	> +EV - 3,0V
U <sub>low</sub> (at 10mA load)	< 0,4V	< 0,4V
Frequency range	0...50kHz	0...100kHz
Inputs	/HOLD	DIRECTION
+EV = 9-30V		
U <sub>high</sub>	> +EV x 0,6	> +EV x 0,6
U <sub>low</sub>	< +EV x 0,25	< +EV x 0,25
+EV = 5V		
U <sub>high</sub>	> 2V	> 2V
U <sub>low</sub>	< 0,8V	< 0,8V
Active	Low	High (CCW)
Not connected	High	Low (CW)
Delay	10µs	150µs

## ACCESSORIES

Mating connector	
Options -00, 01, 02-	Part. No. 01209090 (12 pin EML)
Options -06-	Part. No. 00201010 (19 pin PT)
Mounting bracket	See datasheets for accessories
Mounting kit	
Bearing box	
Couplings	

## OUTPUT CIRCUIT



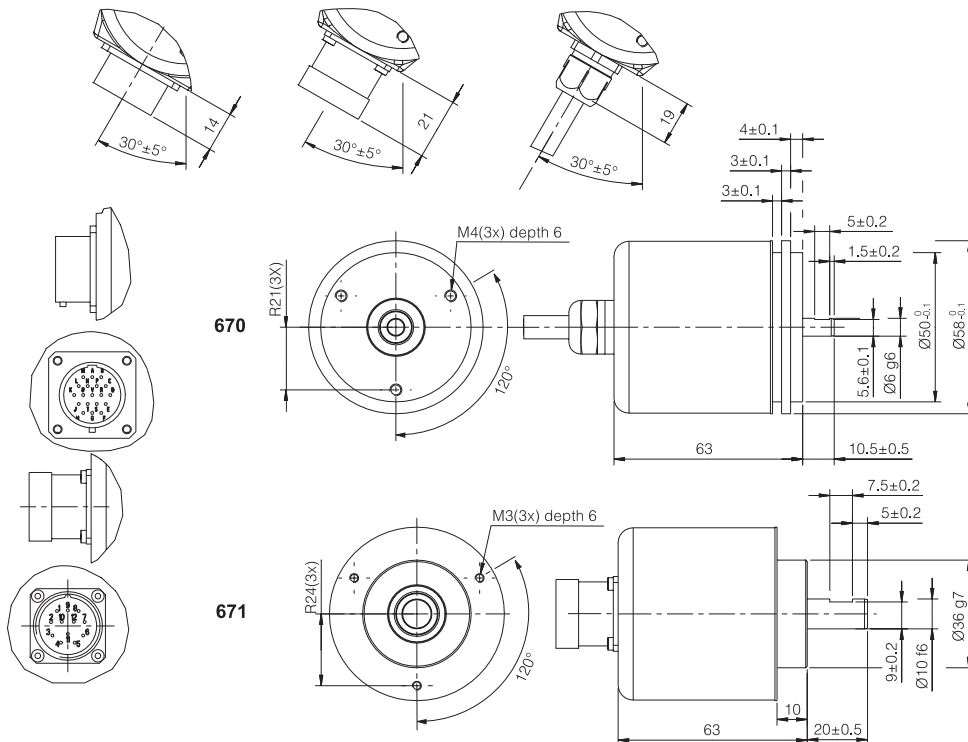
## CONNECTION

Function	19 pin PT	12 pin EML	Colour
Bit 1	A	1	White
Bit 2	B	2	Brown
Bit 3	C	3	Green
Bit 4	D	4	Yellow
Bit 5	G	5	Grey
Bit 6	H	6	Pink
0 Volt	F	10	Blue
+ E Volt	E	12	Red
Bit 7	J	7	Black
Bit 8	K	8	Violet
Bit 9 (8 *)	L	9	Grey/Pink
Bit 10 (9 *)	M	11	Blue/Red
DIRECTION	V		White/Yellow
/HOLD	U		Brown/Yellow

\* Available only with Gray code output signal



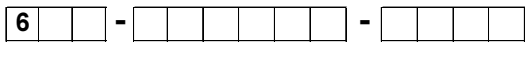
# 670/671 PARALLEL



## MECHANICAL SPECIFICATION

Shaft, Stainless steel	Ø 6mm, 10mm
Moment of inertia	2,6 x 10 <sup>-6</sup> kgm <sup>2</sup>
Load max	
Radial	60N
Axial	50N
Speed max	6000 rpm
Code disc	Unbreakable acrylic glass
Temperature	
Operating	-25°C ... +70°C
Storage	-25°C ... +70°C
Housing	Aluminum, anodized
Weight	Approx. 300g
Protection class	IP 65 according to IEC 529
Vibration	<100m/s <sup>2</sup> (50...2000 Hz)
Shock	<1000m/s <sup>2</sup> (11ms)
Cable	16x0,25mm <sup>2</sup> PVC

## ORDERING INFORMATION



**Type**  
 70 = Syncro flange  
 71 = Clamping flange

**Option**  
 00 = Gray, sink output  
 01 = Gray, source output  
 02 = Gray, HTL / TTL output  
 06 = Binary, HTL / TTL output

**Shaft**  
 1 = Ø 6 mm with face  
 6 = Ø 10 mm with face

**Connection**  
 0 = Connector, axial \*  
 1 = Cable, axial 1.5 m  
 2 = Connector, radial \*  
 3 = Cable, radial 1.5 m  
 8 = Cable, axial xx m  
 9 = Cable, radial xx m

**Supply voltage**  
 1 = 5 Vdc (Not option -01-)  
 5 = 9...30 Vdc

**Internal use**  
 8 = 8 bit  
 9 = 9 bit  
 0 = 10 bit

**Resolution**

\* Options -00, 01, 02- available with 12 pin EML connector.  
 \* Option -06- available with 19 pin PT connector.



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01-03-22 PS. Specifications can be changed without prior notice.