

Incremental double Heavy Duty hollow shaft encoder

- ▶ Extremely robust housing for harsh environments
- ▶ Shock and vibration protected
- ▶ IP 65, encapsulation class
- ▶ Two galvanically separated encoders in one housing
- ▶ Short-circuit protected outputs



ELECTRICAL SPECIFICATION

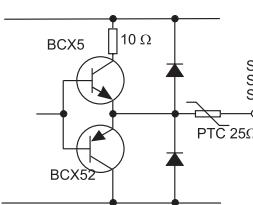
Supply voltage +EV	9-30V	5V ±10%
Polarity protected	---	
Current consumption at no load	65mA @ 24V Max 80mA	85mA Max 155mA
Line counts		
Acrylic glass	150...5000	
Glass	2x 500, 1000, 1024, 2048, 3072, 3600 2x 4096, 5000, 6350, 10 000 Other pulserates, contact Leine & Linde	
Measuring steps	4 x line counts	
Accuracy	1-5000ppr	5001-10000ppr
Dividing error	± 50° el	± 90° el
Channel separation	90° ± 25° el	90° ± 45° el
Outputs	HTL	RS-422
	Short circuit protected	
Load max	± 40mA	± 20mA
Max cable length	200m @ 50kHz	1km (TIA/EIA-422-B)
U _{high} (at 10mA load)	> +EV - 4,0V	> 3,0V
U _{low} (at 10mA load)	< 2,5V	< 1,15V
Frequency range	0...100kHz	0...200kHz

ACCESSORIES

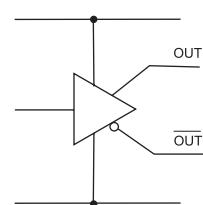
Torque arm	
M5	Part. No. 01208013
M6	Part. No. 01208014

OUTPUT CIRCUIT

Output A: High current HTL

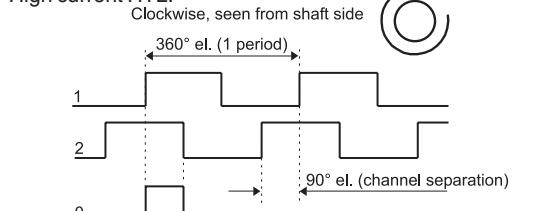


Output A, B: Linedriver

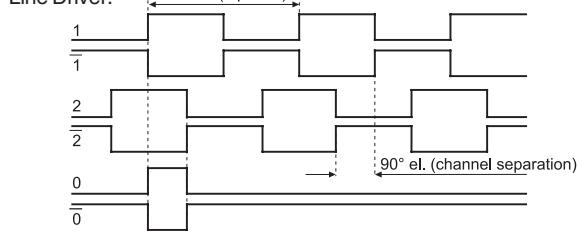


OUTPUT SIGNALS

High current HTL:

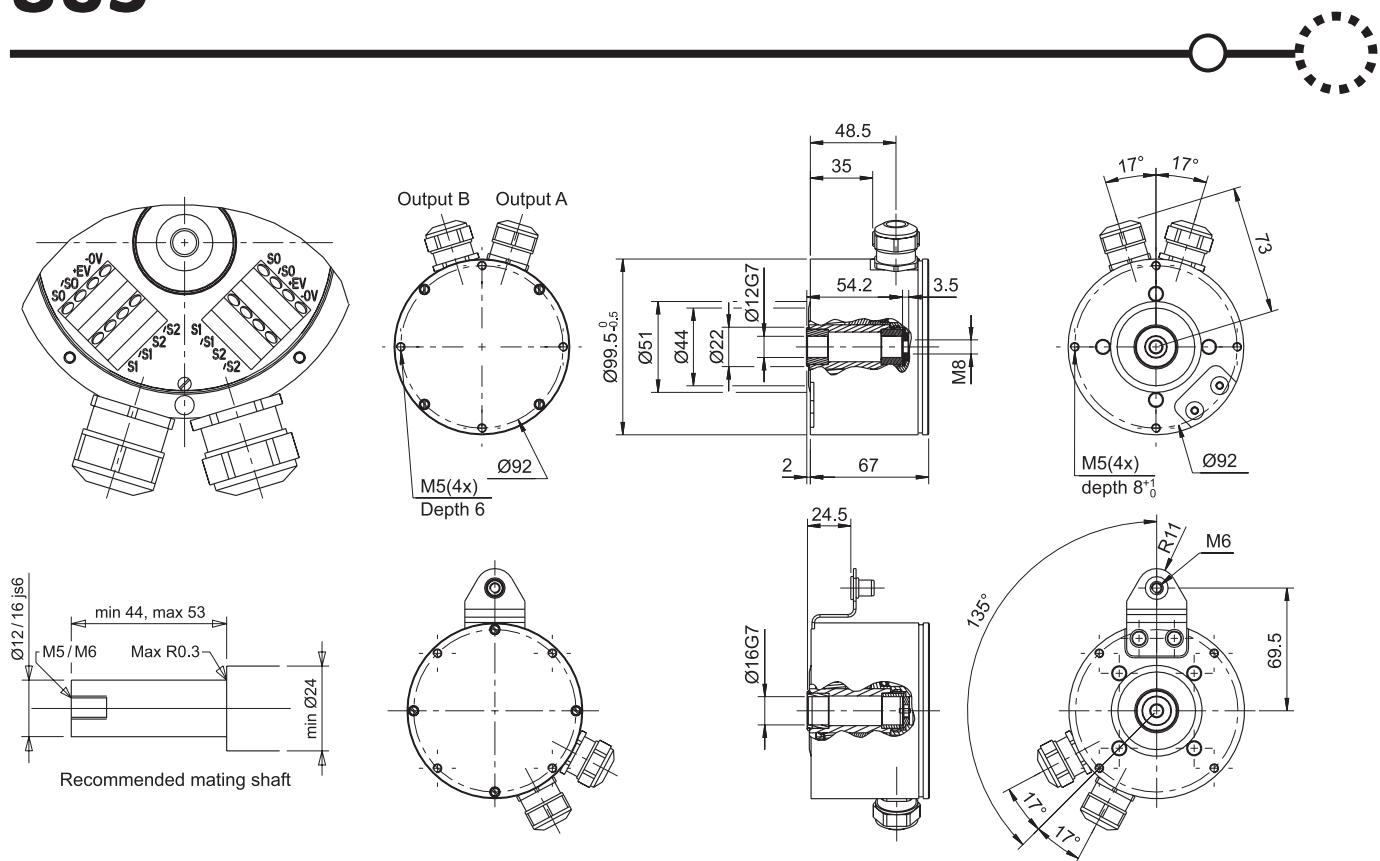


Line Driver:



CONNECTION

Function	Colour	Terminal
1	Green	See drawing or label
1	White	
2	Black	
2	Yellow	
+ E Volt	Red	
0 Volt	Blue	
0	Brown	
0	Violet	
Case	Shield	



MECHANICAL SPECIFICATION

Isolated Hollow-shaft	Ø12, 16mm, Stainless steel / PEEK	
Moment of inertia	$55 \times 10^{-6} \text{ kgm}^2$	
Load max		
Radial	300N	
Axial	100N	
Speed max	4000 rpm	
Code disc	Standard	Extended temp
Temperature		
Operating	-25°C ... +70°C	-20°C ... +80°C
Storage	-25°C ... +70°C	-25°C ... +80°C
Housing	Aluminum, anodized	
Weight	Approx. 1300g	
Protection class	IP 65 according to IEC 529	
Vibration	<100m/s ² (50...2000 Hz)	
Shock	<1000m/s ² (11ms)	
Cable	10x0,25mm ² twisted pair PVC	

ORDERING INFORMATION

8 6 5 - - Encoder A Encoder B

Option Mechanical

- 0 = Standard
- 1 = Torque bracket

Electrical (A / B)

- 0 = Supply 2 x 9-30V, Output 2 x HTL*
- 1 = Supply 9-30V / 5V, Output HTL / TTL*
- 2 = Supply 2 x 9-30V, Output 2 x HTL**
- 3 = Supply 2 x 5V, Output 2 x TTL**
- 4 = Supply 9-30V / 5V, Output HTL / TTL**
- 5 = Supply 2 x 9-30V, Output HTL / RS-422**
- 7 = Supply 2 x 9-30V, Output 2 x RS-422**

Hollow-shaft

- 7 = Ø 12 mm
- 8 = Ø 16 mm

Connection

- 4 = 2 x M20 cable gland, radial Ø8-11mm
- 5 = 2 x M20 cable gland, radial Ø11-14mm
- 3 = 2 x Cable, radial 1.5 m
- 9 = 2 x Cable, radial xx m

Supply voltage

- 9 = See options

Internal use

- 1 = Standard 150...2500 ppr
- 2 = Standard 2500...5000ppr
- 4 = Extended temp 2 x 500, 1000, 1024, 2048, 2500, 3072, 4096, 5000, 6350, 10000ppr

Other pulserates, contact Leine & Linde for info.

Line counts

* Encoder A with 3 channel High current HTL output, encoder B with 6 channel linedriver output. Only available with cable output.

** Encoder A and B with linedriver output.