



Heavy Duty incremental encoder

- ▶ Extremely robust housing for harsh environments
- ▶ 6 or 3 short-circuit protected outputs
1, 1̄, 2, 2̄, 0, 0̄ / 1, 2, 0
- ▶ IP 65, encapsulation class
- ▶ Electrically insulated hollow-shaft
- ▶ 5 Vdc or 9...30 Vdc
- ▶ Available with Advanced internal diagnostics, ADS



861

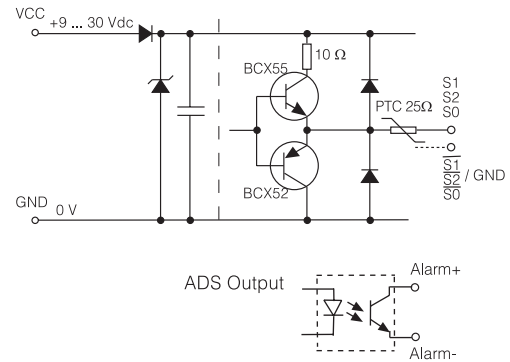
ELECTRICAL SPECIFICATION

Supply voltage +EV	9-30V	5V ± 10%
	Polarity protected	---
Current consumption at no load	60mA @ 24V Max 80mA	85mA Max 155mA
Line counts	1000, 1024, 2048, 4096ppr	
Measuring steps	4 x Line counts	
Accuracy		
Dividing error	± 50° el	
Channel separation	90° ± 25° el	
Outputs	High current HTL	RS-422
	Short circuit protected	
Load max	± 40mA	± 20mA
Max cable length	350m @ 100kHz	1km (TIA/EIA-422-B)
U _{high} (at 40mA load)	> +EV - 4,0V	> +EV - 2,0V
U _{low} (at 40mA load)	< 2,5V	< 1,15V
Frequency range	0...100kHz	0...200kHz
Option	Advanced Diagnostic System ADS	
Alarm output	Opto-coupler	
OK	Closed-circuit	V _{CE} < 2V at 10mA
Error	Open-circuit	min 500ms
Voltage max	35V	
Current max	30mA	
PC communication	RS-232	Max 10m cable

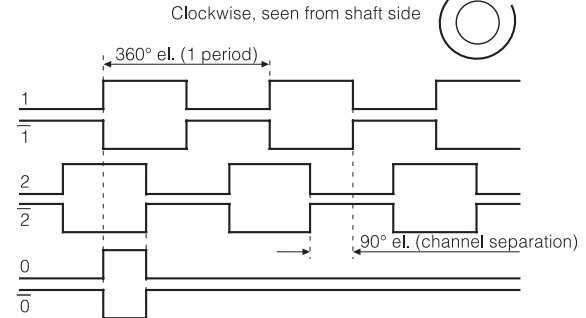
ACCESSORIES

Torque arm	
M5	Part. No. 01208013
M6	Part. No. 01208014
ADS PC software kit	Part. No. 01209084

OUTPUT CIRCUIT

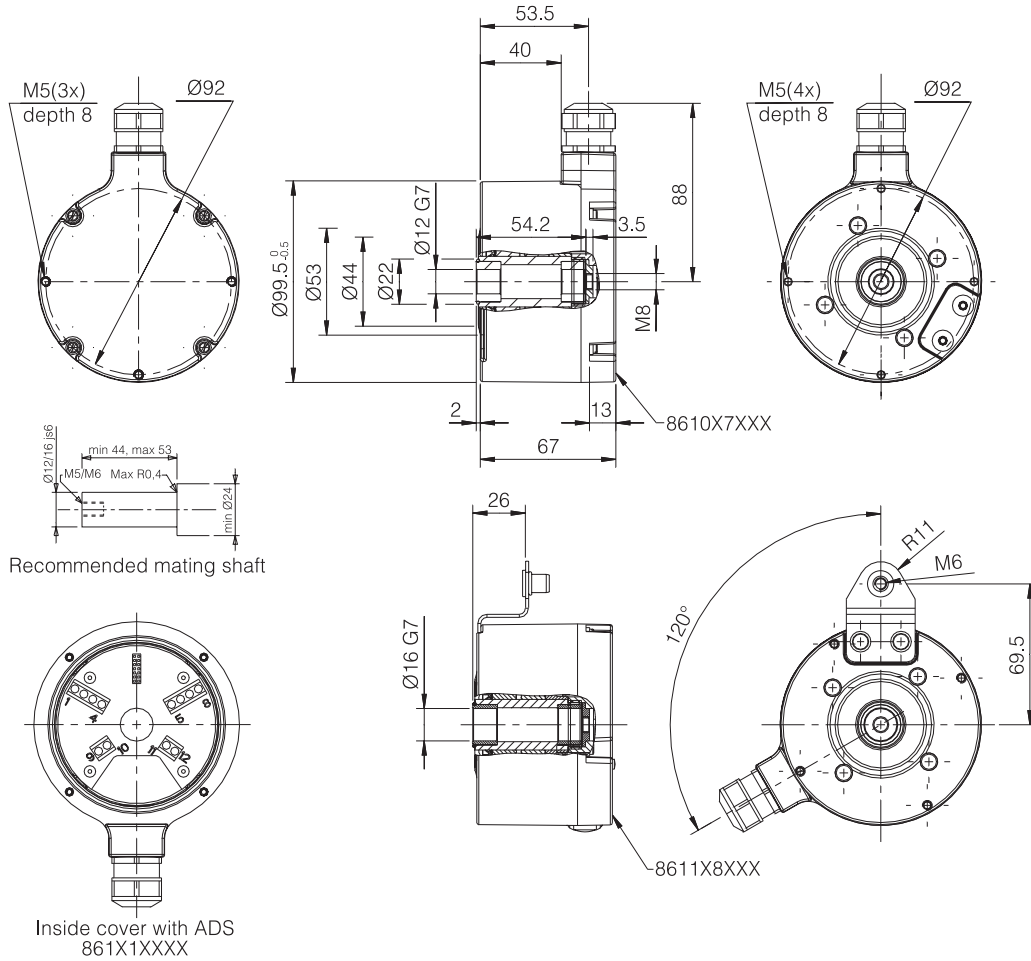


OUTPUT SIGNALS



CONNECTION

Function	Terminal	Colour	
+ E Volt	1	Red	
0 Volt	2	Blue	
0	3	Brown	
0̄ (GND *)	4	Violet	* 3 channel output
1	5	Green	
1̄ (GND *)	6	White	
2	7	Yellow	
2̄ (GND *)	8	Black	
Alarm +	9	Grey	ADS outputs
Alarm -	10	Pink	
RXD	11	Grey / Pink	
TXD	12	Red / Blue	
Case		Shield	



MECHANICAL SPECIFICATION

Isolated Hollow-shaft	Ø12, 16mm, Stainless steel / PEEK
Moment of inertia	55 x 10 ⁻⁶ kgm ²
Load max	
Radial	300N
Axial	100N
Speed max	4000 rpm
Code disc	Glass disc
Temperature	
Operating	-20°C ... +80°C
Storage	-25°C ... +80°C (+105°C max 1h)
Housing	Aluminum, coated
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 (Not ADS)

ORDERING INFORMATION

8 6 1 - [] - []

Option

Mechanical

- 0 = Standard
- 1 = Torque bracket

Electrical

- 0 = Standard
- 1 = ADS

Hollow-shaft

- 7 = Ø 12 mm
- 8 = Ø 16 mm

Connection

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

Supply voltage

- 1 = 5 Vdc (Not available with ADS)
- 5 = 9...30 Vdc

Outputs

- 5 = 3 channels 1, 2, 0
- 6 = 6 channels 1, 1̄, 2, 2̄, 0, 0̄

Line counts

- 1000, 1024, 2048, 4096 ppr

Leine&Linde ISO 9001 certified

Leine&Linde AB, Box 8, SE-645 21 Strängnäs, Sweden. Olivehällsvägen 8.
Phone: +46 (0)152 265 00. Fax: +46 (0)152 265 05. E-mail: info@leinelinde.se

01-07-06 PS. Specifications can be changed without prior notice.