

Flat Pancake Design - 700 Series

Compact Design

The 700 series is compact and robust. The series features large hollow shafts up to 25.4 mm, which means that it can often be mounted directly on the motor's shaft without an intermediate adapter for shaft reduction. This characteristic contributes to minimising the overall build length, and at the same time facilitates mounting. Despite its compactness, the encoder is designed for the tough environments where a typical Leine & Linde product is used. Mechanically it features a dual set of heavy duty bearings and a well-encapsulated enclosure.

Electronically it is built for reliability in tough environments where it is subjected to vibrations and electrical disturbances.

Resolution

Incremental Pulses Per Revolution:	
10 ppr	1024 ppr
50 ppr	1200 ppr
100 ppr	1250 ppr
150 ppr	1800 ppr
200 ppr	2000 ppr
256 ppr	2048 ppr
300 ppr	2400 ppr
360 ppr	2500 ppr
400 ppr	3072 ppr
500 ppr	4000 ppr
512 ppr	4096 ppr
600 ppr	4800 ppr
720 ppr	5000 ppr
800 ppr	6350 ppr
900 ppr	10000 ppr
1000 ppr	

Electronics

Output Interfaces (Supply Voltage):
HTL (5-30 Vdc)
HCHTL (9-30 Vdc)
T T L (5 V d c)
RS422 (9-30 Vdc)
1 Vpp (5Vdc)

Flange

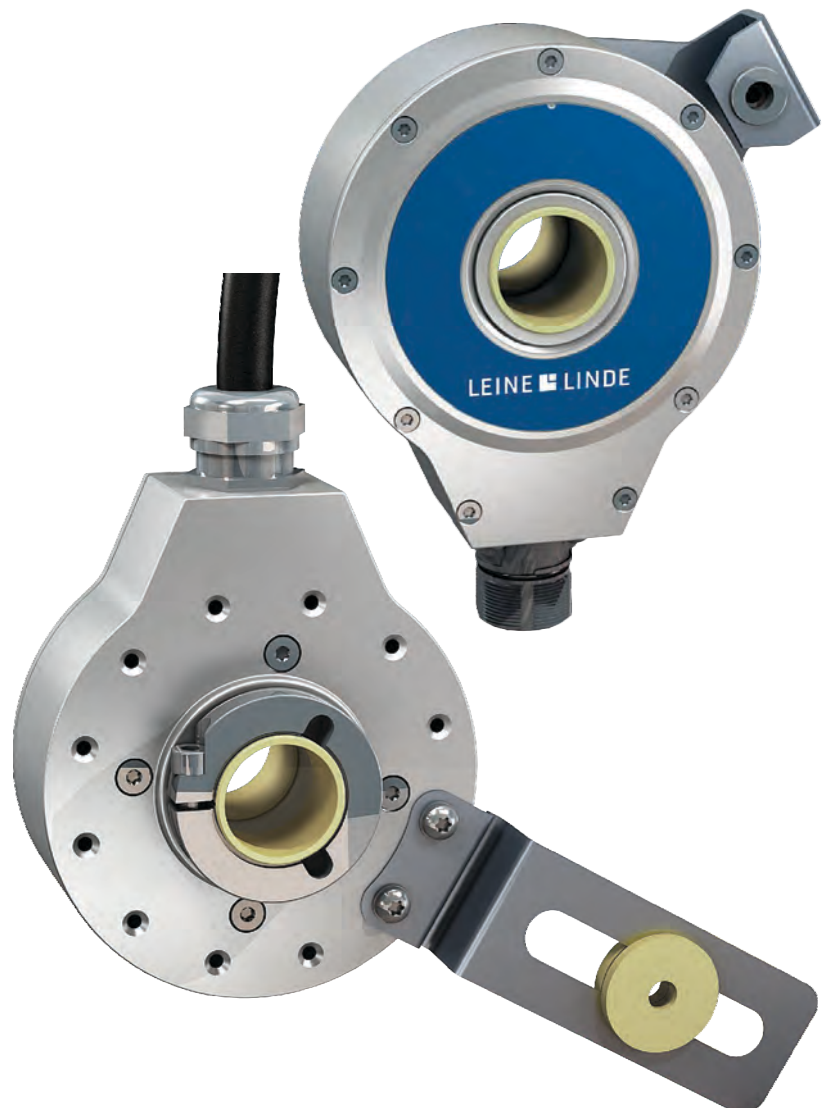
Torque bracket (120°)
Tether arm (with insulation)

Shaft

Through-Going Hollow Shafts with Insulation:
Ø25 mm
Ø20 mm
Ø16 mm
Ø14 mm
Ø12 mm

Connection

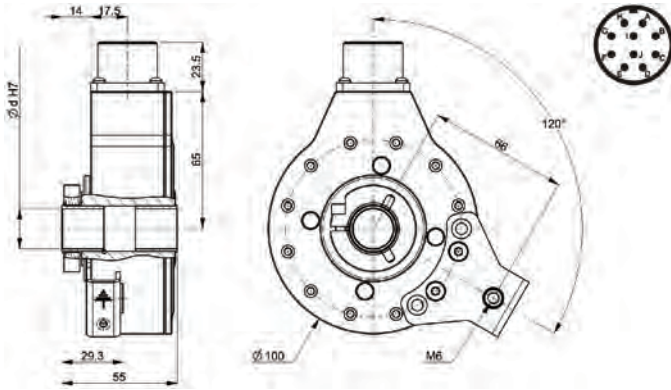
M23 connector 12 pin (CCW)
MS connector 10 pin
MS connector 7 pin
Cable (free length)



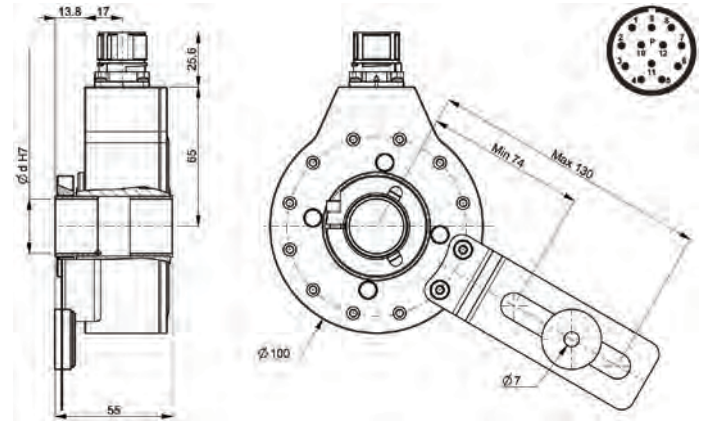
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Mechanics

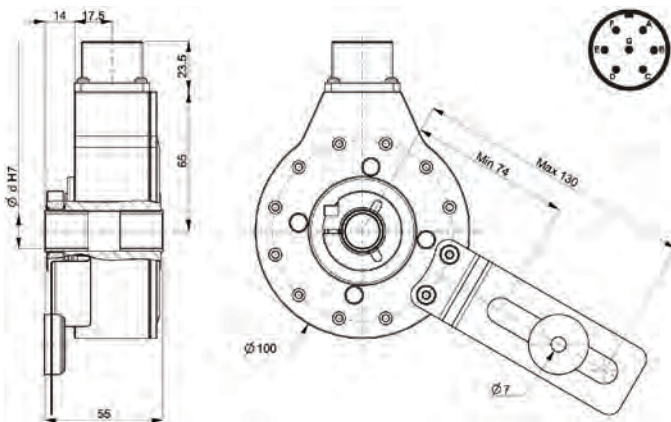
Model CHI 703 with Torque Bracket and 10 Pin MS Connector



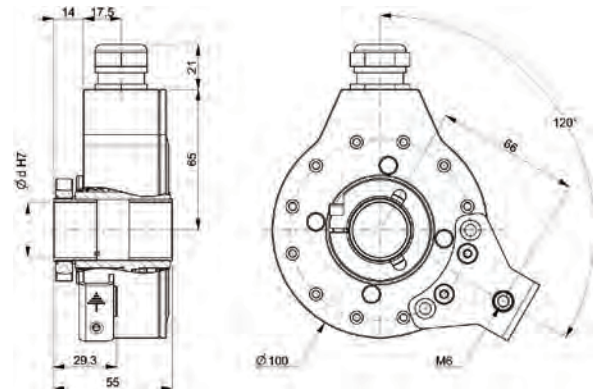
Model CHI 703 with Tether Arm and 12 Pin M23 Connector



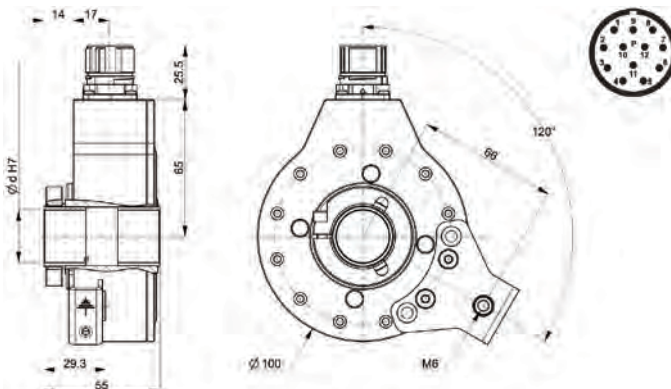
Model CHI 703 with Tether Arm and 7 Pin MS Connector



Model CHI 703 with Tether Arm and 7 Pin MS Connector

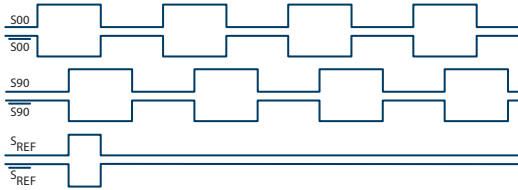


Model CHI 703 with Torque Bracket and 12 Pin M23 Connector



Electronics

Square Wave Signals



Sine Wave Signals

Sine waves are an alternative form of output signal. The analogue signal produces a unique amplitude for each position on the wave, allowing interpolation and very high resolutions. The interface 1 Vpp is often used in safety-critical applications where detection are required of extremely small movements.



Output Interfaces (Supply Voltage):

Interface	TTL	RS422	HTL	HCHTL
Supply	5 Vdc	9-30 Vdc	5-30 Vdc	9-30 Vdc
Output signal	5 Vdc	5 Vdc	5-30 Vdc	9-30 Vdc
Suitable for	Low frequencies over short cables	High frequencies over long cables	High frequencies over medium-length cables	Medium frequencies over long cables
Max frequency	200 kHz	200 kHz	200 kHz	200 kHz
Max cable length	50 m at 50 kHz	1000 m at 200 kHz	100 m at 100 kHz	350 m at 100 kHz

Key Code

CHI 703

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Model

703 = Standard

Shaft

- 12 = Ø12 mm through-going hollow shaft
- 14 = Ø14 mm through-going hollow shaft
- 16 = Ø16 mm through-going hollow shaft
- 20 = Ø20 mm through-going hollow shaft
- 25 = Ø25 mm through-going hollow shaft
- 01 = Ø1 inch through-going hollow shaft
- 58 = Ø5/8 inch through-going hollow shaft
- 34 = Ø3/4 inch through-going hollow shaft

Flange

- 2 = Torque bracket 120°
- 9 = Tether arm with insulation

Electronics

- 1 = TTL (supply 5 Vdc, output 5 Vdc)
- 5 = HCHTL (supply 9-30 Vdc, output 9-30 Vdc)
- 6 = HTL (supply 5-30 Vdc, output 5-30 Vdc)
- 7 = RS422 (supply 9-30 Vdc, output 5 Vdc)
- 9 = Sinusoidal 1 Vpp (supply 5 Vdc, output 1 Vpp)

Connection

- 2 = M23 connector 12 pin (CCW)
- 7 = MS connector 7 pin
- 8 = MS connector 10 pin
- 9 = Cable (specify length upon order)

Resolution

- 10, 50, 100, 150, 200, 256, 300, 360, 400, 500, 512, 600, 720, 800, 900, 1000, 1024, 1200, 1250, 1800, 2000, 2048, 2400, 2500, 3072, 4000, 4096, 4800, 5000, 6350, 10000 ppr
- Sinusoidal 1 Vpp: 1024, 2048 ppr
- Other resolutions available upon request.