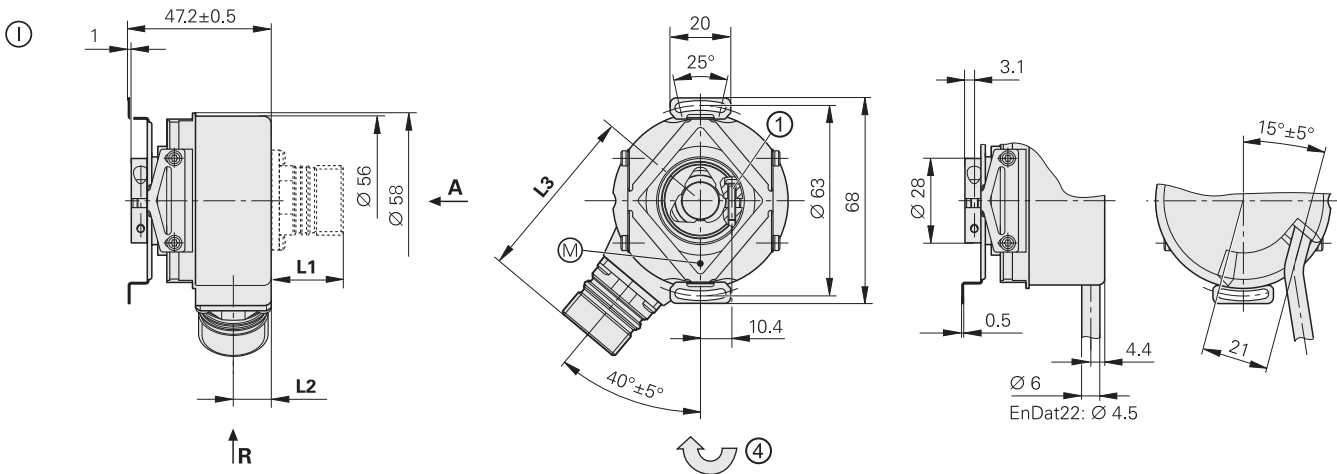


ECN/EQN/ERN 400 series

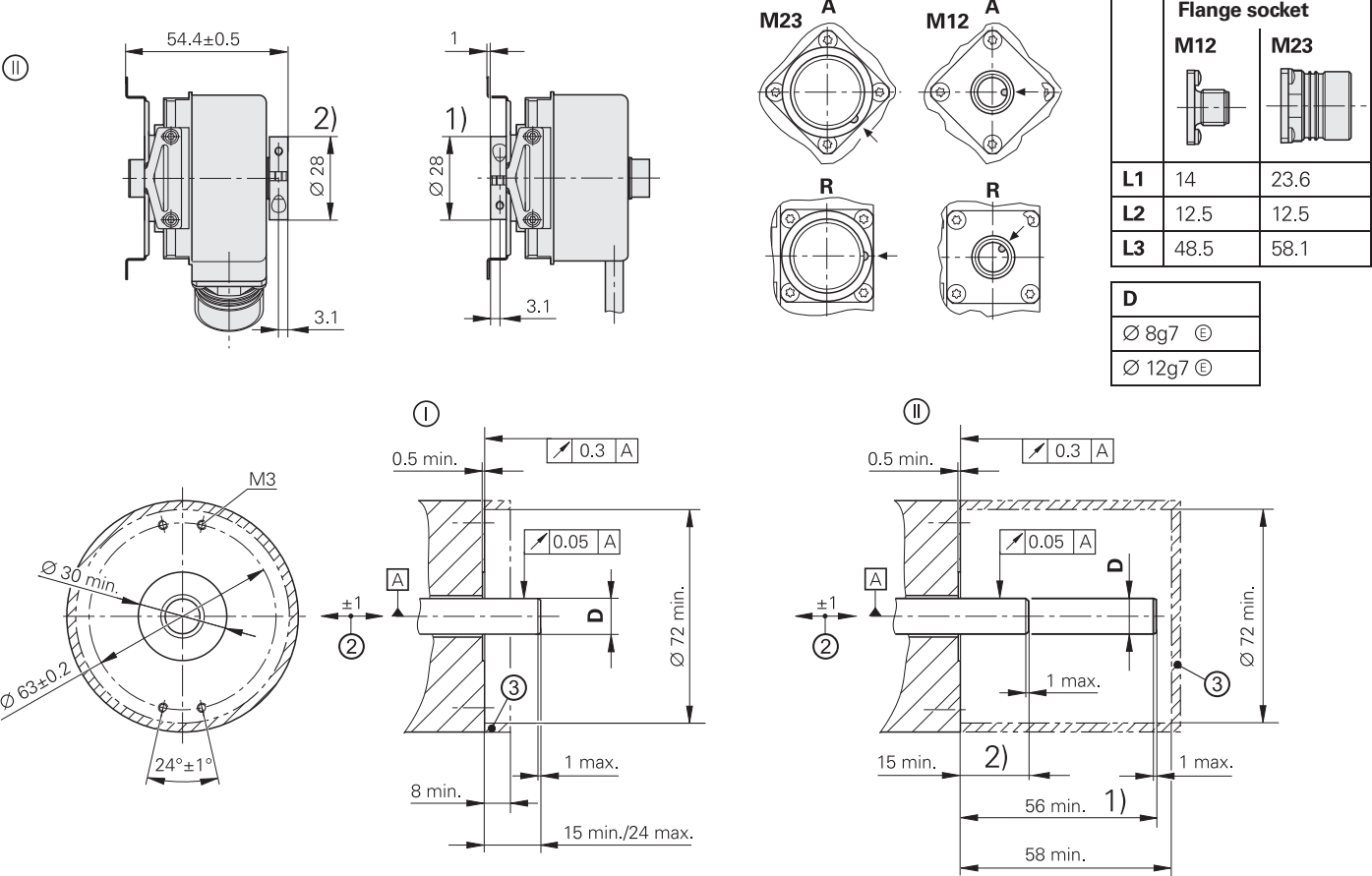
- Absolute and incremental rotary encoders
- Stator coupling for plane surface
 - Blind hollow shaft or hollow through shaft



Blind hollow shaft



Hollow through shaft



mm
Tolerancing ISO 8015
ISO 2768:1989-mH
≤ 6 mm: ±0.2 mm

- Radial cable (can also be used axially)
A = Bearing of mating shaft
M = Measuring point for operating temperature
1 = Clamping screw with X8 hexalobular socket
2 = Compensation of mounting tolerances and thermal expansion; no dynamic motion permitted
3 = Ensure protection against contact (EN 60529)
4 = Incremental rotary encoders: direction of shaft rotation for output signals as per interface description
Absolute rotary encoders: direction of shaft rotation for ascending position values
1) = Clamping ring on housing side (delivery condition)
2) = Clamping ring on coupling side (optionally mountable)

Multiturn			
EQN 437		EQN 425	
EnDat 2.2		EnDat 2.2	SSI
EnDat22		EnDat01	SSI41r1
33554432 (25 bits)		8192 (13 bits)	
4096			
Pure binary			Gray
≤ 12000 rpm for continuous position value	512 lines: ≤ 5000/10000 rpm ±1 LSB/±100 LSB 2048 lines: ≤ 1500/10000 rpm ±1 LSB/±50 LSB		≤ 12000 rpm ±12 LSB
≤ 7 μs ≤ 8 MHz	≤ 9 μs ≤ 2 MHz		≤ 5 μs –
Without	~ 1 V _{PP} ²⁾		
–	512 2048	512	
– –	512 lines: ≥ 130 kHz; 2048 lines: ≥ 400 kHz –		
±20"	512 lines: ±60"; 2048 lines: ±20"		
• M12 flange socket, radial • Cable (1 m) with M12 coupling	• M23 flange socket, radial • Cable (1 m) with M23 coupling or without connecting element		
DC 3.6 V to 14 V	DC 3.6 V to 14 V	DC 4.75 V to 30 V	
3.6 V: ≤ 0.7 W 14 V: ≤ 0.8 W	4.75 V: ≤ 0.68 W 30 V: ≤ 0.88 W		
5 V: 95 mA	5 V: 85 mA 24 V: 20 mA		

3) For the relationship of operating temperature to shaft speed and supply voltage, see "General mechanical information"

4) With two shaft clampings (only with hollow through shaft)

5) Also available with functional safety; for dimensions and specifications, see Product Information document