



MA110

HEAVY DUTY INCREMENTAL ENCODER Ø 58 MM

Encoder with synchroflange and 3 mounting holes M4

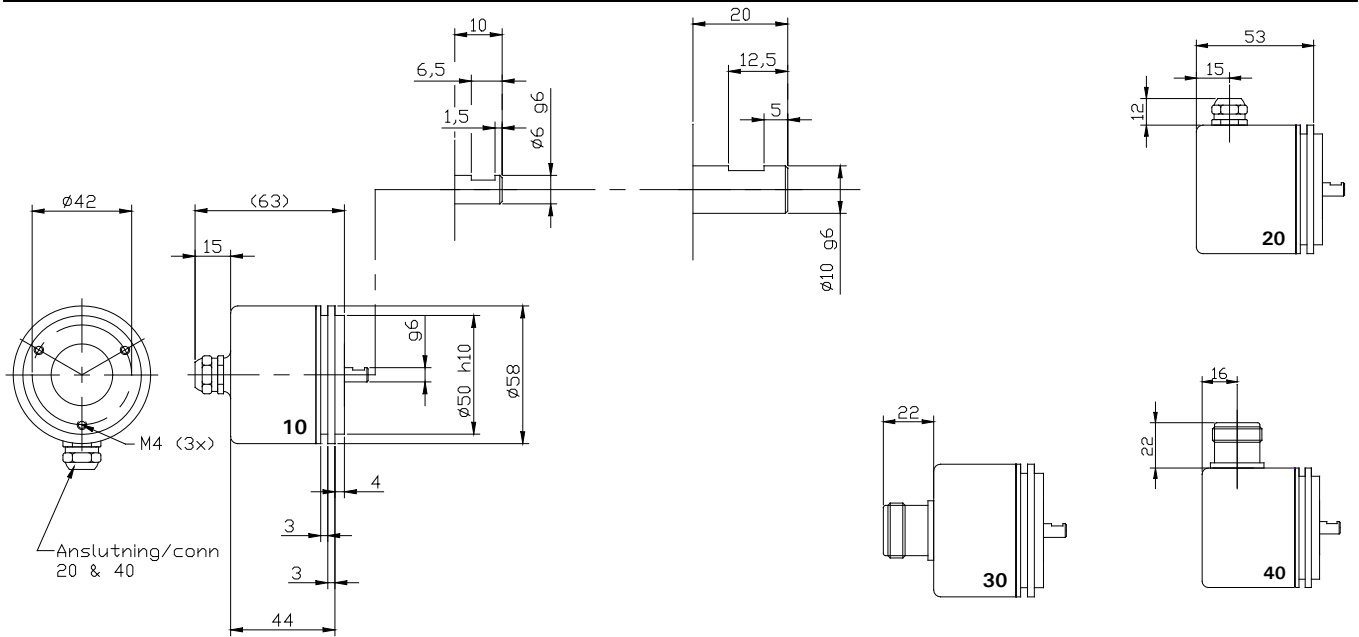
- Ø 58 mm
- 6 or 10 mm solid shaft with face
- Enlarged sturdy bearings
- Short circuit and reversed polarity proof
- Dust and splash proof IP65
- Standard
 - 5-30V power supply, 300KHz
 - 2 square wave signals
 - Marker Pulse, Inverted Signals and Sense
- Options
 - 5V power supply, 300KHz
 - Customization upon request



*Flexible and durable
encoder for demanding
applications.*

CE Conforms to european EMC directive 89/336/EEC
standards:
EN61000-6-4 emission in industrial environments,
EN61000-6-2 immunity in industrial environments.

INCREMENTAL ENCODER MODEL MA110

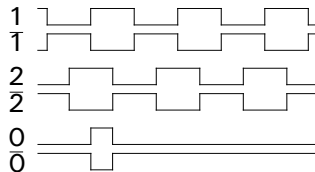


ELECTRICAL SPECIFICATION, STANDARD

| | |
|-------------------------|-----------------------------------|
| Supply voltage | Vcc 5–30 V |
| Current consumption | Max 40 mA without load |
| Output circuit | Linedriver RS422A compatible |
| Low level output volt. | Max <0,5 V at 20 mA load and 20°C |
| High level output volt. | Min >Vcc-1V at 20mA load and 20°C |
| Short circuit protected | Yes |
| Polarity protected | Yes |
| Transient protected | Yes |
| Max load | 70 mA |

OUTPUT SIGNALS, STANDARD

CCW rotation viewed from shaft end



SIGNAL ACCURACY

| | |
|-----------------------|-----------------|
| Dividing error max | ±50 el° |
| Channel separation | 90 ±25 el° |
| Max frequency | 300 KHz |
| Operating temperature | -40° till +80°C |

MECHANICAL SPECIFICATION

| | |
|----------------------------|---|
| Housing | Aluminum, electrically conductive for increased interference protection |
| Sealing | IP65 dust and splash proof |
| Bearings | Permanently greased |
| Bearing load at 1 000 rpm: | |
| Radial | 180 N Gives 50 000 hrs bearing life |
| Axial | 130 N |
| Max rpm | 6 000 (12 000) |
| Vibration | 20g 20-2000 Hz |
| Chock | 200g vid 11 ms |
| Weight | ca: 275 gr (without cable) |

CONNECTIONS

- 10. Axial cable 1 m, 10x0,25TPUR
- 20. Radial cable 1 m, 10x0,25TPUR
- 30. Axial 12-pin male connector CON-FM12P
- 40. Radial 12-pin male connector CON-FM12P
- 70. Axial cable 1 m with male connector CON-CF12P
- 80. Radial cable 1 m with male connector CON-CF12P

FUNCTIONS

| | Cable | Connector | Cable/Conn |
|---------|-------------|-----------|------------|
| 1 | Brown | 5 | 5 |
| 2 | Grey | 8 | 8 |
| 0 | Red | 3 | 3 |
| 1 inv | Green | 6 | 6 |
| 2 inv | Pink | 1 | 1 |
| 0 inv | Black | 4 | 4 |
| +V | Brown/Green | 12 | 12 |
| 0V | White/Green | 10 | 10 |
| +V sens | Blue | 2 | 2 |
| 0V sens | White | 11 | 11 |
| Gnd | Shield | Chassi | 9 |

MATING CONNECTORS

For 30 and 40, CON-CF12S female connector
For 70 and 80, CON-CM12S female connector

ORDERING KEY

| | | | | | |
|-------------------|-------|---|------|---|---|
| Model | MA110 | 6 | 1000 | 1 | X |
| Shaft 6 or 10 mm | | | | | |
| Pulserate 1-5 000 | | | | | |
| Connection | | | | | |

