

MA550 - SERIES



HEAVY DUTY INCREMENTAL ENCODER Ø 30 MM

Encoder with synchro flange and 3 mounting holes M3

- Ø 30 mm
- 4 mm solid shaft without face or 6 mm with face
- Enlarged sturdy bearings
- Short circuit and reversed polarity proof
- Ingress protection up to IP67, depends on connection
- Standard: 5-30V Power Supply, 300kHz
6 Square Wave Signals
Marker Pulse, and inverted Signals
- Option: 7-35V power supply, 100 kHz
Customization upon request

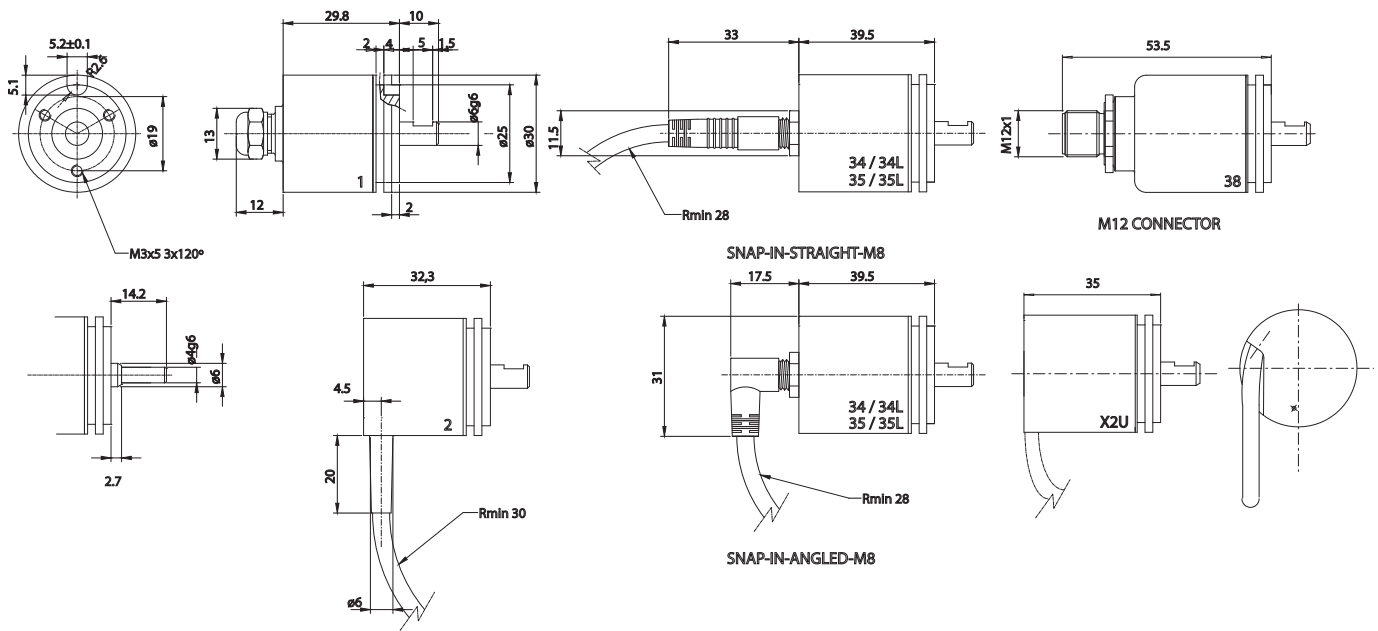


*Flexible and durable
encoder for demanding
applications*

 File E342441



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

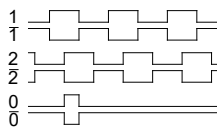


ELECTRICAL SPECIFICATION

Supply voltage ⁽¹⁾	Vcc 5–30 V
Supply voltage ⁽²⁾	Vcc 7-35 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

CCW rotation seen from shaft end



SIGNAL ACCURACY

Dividing error max	±50 el°
Channel separation	90 ±25 el°
Max frequency	300 kHz or 100 kHz
Operating temperature	-40° to +80°C

MECHANICAL SPECIFICATION

Housing	Aluminum, electrically conductive for increased interference protection
Sealing	IP67 dust and splash proof (IP66 at shaft outlet)
Bearings	Permanently greased
Bearing load at	1 000 rpm
Radial	30 N Gives 50 000 hrs
Axial	30 N bearing life
Max rpm	3 000 (12 000)
Vibration	20g 20-2000 Hz
Shock	200g at 11 ms
Weight	approx. 60 gr (without cable)

CONNECTIONS

1	Axial cable, 1 m DEF	35	Axial 5-pin male M8
2	Radial cable, 1 m DEF	35L	Axial 5-pin male M8 + LED
1xU	Axial cable, Unitronic	38	Axial 8-pin male M12
X2U	Axial/Radial, 1m Unitronic		

FUNCTION

	1,2	1xU, X2U	35/35L	38
1	Green	Green	3	3
1 inv	White	-	-	1
2	Yellow	Yellow	4	4
2 inv	Black	-	-	5
0	Brown	Grey	5	2
0 inv	Violet	-	-	6
+V	Red	Brown	1	8
0V	Blue	White	2	7
Gnd			Chassi	Chassi

MATING CABLE CONNECTORS

M8SR5-5, female straight screw connector, 5m cable
M8SV5-5, female angled screw connector, 5m cable

ORDERING CODE

Model	MA550	6	100	1	X
Shaft 4 or 6 mm					
Pulse rate	1-1	250			
Connection					
X= meter cable					



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⁽¹⁾ Connection 1, 2 & 38 is powered by 5-30 Vdc, 6 channels, 300 kHz

⁽²⁾ Connection 1xU, X2U, 35 & 35L is powered by 7-35 Vdc, 3 channels, 100 kHz