

MG35-SERIES



BEARINGLESS INCREMENTAL ENCODER Ø 30 MM

- High ingress protection class IP68
- Non-contact measuring principle
- No wearing parts with long useable life
- Small dimensions & Flat design

Standard: 7-35Vdc Power Supply, 100kHz
2 Square Wave Signals up to 1024 ppr
24 months Warranty

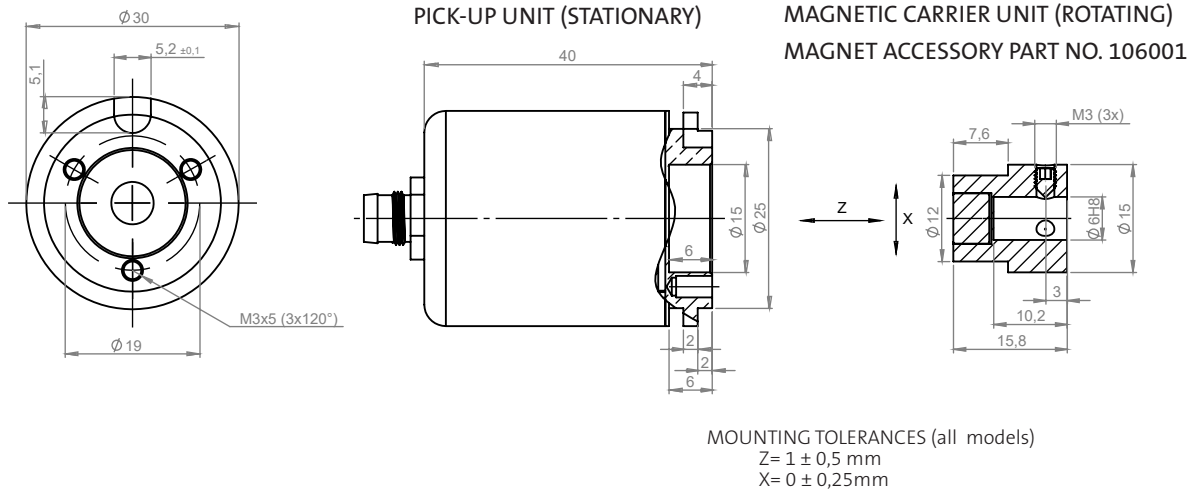
Options: 5V Power Supply



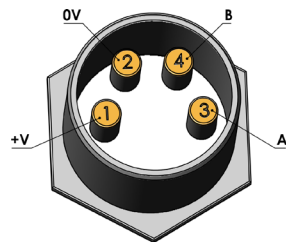
*Flexible and durable
encoder for demanding
applications*



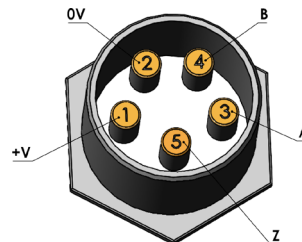
Conforms to european EMC directive
89/336/EEC standards:
EN61000-6-4 emission in industrial environments
EN61000-6-2 immunity in industrial environments



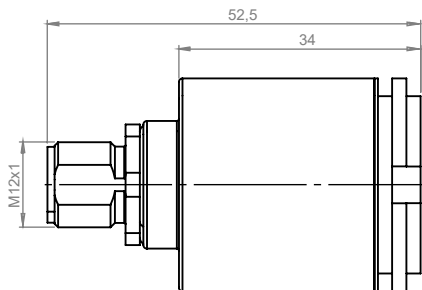
4 PIN M8 MALE ASSIGNMENT
DESCRIPTION -CON 34



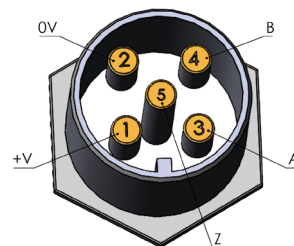
5 PIN M8 MALE ASSIGNMENT
DESCRIPTION -CON 35



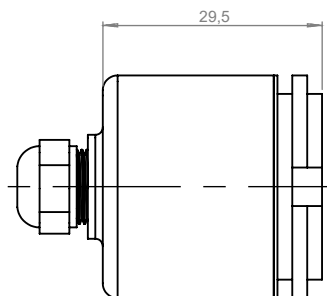
Connection 34 & 35



5 PIN M12 MALE ASSIGNMENT
DESCRIPTION -CON 55



Connection 55 (5 PIN M12 MALE ASSIGNMENT)



Connection 1XU, (Cable 0,25 mm)

INCREMENTAL ENCODER MODEL

MG35-SERIES

MECHANICAL SPECIFICATION

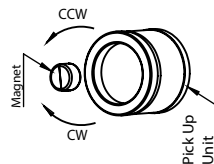
Housing material	Anodized aluminium Optional: stainless steel (AISI 316) or plastic
Encapsulation class	IP68 (IEC 60529)
Max. rotational speed	9000 rpm
Vibration	50g 20-2000 Hz (IEC 60068-2-6)
Shock	200g at 11 ms (IEC 60068-2-27)
Weight	Approx. 30 g (without cable)

ELECTRICAL SPECIFICATION, STANDARD

Power supply	7-35 Vdc or 5V (Optional)
Current consumption	Max 40 mA, without load
Output circuit	Line driver
Low level output volt	Max <0,5 V at 20 mA load and 20°C
High level output volt	Min >Vcc-2V at 20mA load and 20°C
Short circuit protected	Yes (thermal, overheat protected)
Polarity protected	Yes (applies to function +V and 0V)
Transient protected	Yes
Max load	70 mA
Resolution	1 to 1024 ppr
Max frequency	100 kHz
Operating temperature	-40° to +70°C

CCW/CW ROTATION

CCW rotation viewed
from shaft end (all models)



CONNECTION

1XU	Axial cable 0.25mm², free cable length, X = No. meters
34	Axial 4pin M8 Male connector
35	Axial 5 pin M8 Male connector
54	Axial 4 pin M12 Male connector
55	Axial 5 pin M12 Male connector

FUNCTION 1XU (NC= not connected)

Model	MG35A	OUTPUT SIGNAL
1	Green	
2	Yellow	
0	NC	
0 Inverted	NC	1
+V	Brown	2
0V	White	
STATUS	NC	

Model	MG35B	OUTPUT SIGNAL
1	Green	
2	Yellow	
0	Gray	
0 Inverted	NC	1
+V	Brown	2
0V	White	0
STATUS	NC	

(0-Pulse = connected)

Model	MG35C	OUTPUT SIGNAL
1	Green	
2	Yellow	
0	NC	
0 Inverted	NC	1
+V	Brown	2
0V	White	
STATUS	Grey	

(Status connected= indicating functionality)

Model	MG35D	OUTPUT SIGNAL
1	Green	
2	Yellow	
0	Gray	1
0 Inverted	NC	2
+V	Brown	
0V	White	0
STATUS	NC	

APPLIED CONNECTION TYPES 1XU, 35 & 55 (0-Pulse = 180° Mechanical)

Model	MG35E	OUTPUT SIGNAL
1	Green	
2	Yellow	
0	Gray	1
0 Inverted	NC	2
+V	Brown	
0V	White	0
STATUS	Pink	

APPLIED CONNECTION TYPES 1XU (0-Pulse connected & status connected, indicating functionality)

FUNCTION CON 34

		OUTPUT SIGNAL
1	Blue Pin 3	
2	Black Pin 4	
+V	Brown Pin 1	Applied functions: A
0V	White Pin 2	

FUNCTION CON 35 & 55

		OUTPUT SIGNAL
1	Blue Pin 3	(View applicable functions: A,B,C,D)
2	Black Pin 4	
0*	Grey Pin 5	* Depending on function status or zero signal
+V	Brown Pin 1	
0V	White Pin 2	

ACCESSORIES*

		ORDERING CODE
M8SR5,	Snap Straight 5m 4x0,25 PUR/PUR	101109
M8SV2,	Snap Angled 2m 4x0,25 PUR/PUR	101110
M8SV5,	Snap Angled 5m 4x0,25 PUR/PUR	101111
M8SR5-5	Screw, Straight 5m 5x0,25 PUR/PUR	101115
M8SV5-5	Screw, Angled 5m 5x0,25 PUR/PUR	101116

*Not included, ordered separately

MATING CONNECTORS FEMALE*

DESCRIPTION ORDERING CODE

M8SR5,	Snap Straight 5m 4x0,25 PUR/PUR	101109
M8SV2,	Snap Angled 2m 4x0,25 PUR/PUR	101110
M8SV5,	Snap Angled 5m 4x0,25 PUR/PUR	101111

*Not included, ordered separately

ORDERING CODE

Model	MG35D-06-0500-12U
Function	
Magnet carrier¹	
Pulserate (1-1024)	
Connection	

¹ Specify -06 to include magnet carrier unit (part no. 106001)
Specify -0X to exclude magnet carrier unit (part no. 106001)



Skogsvägen 1, SE-645 34 Strängnäs, Sweden
Tel: +46 152 33 11 90 Fax: +46 152 33 11 91
E-mail: info@emetaencoders.com
www.emetaencoders.com