

MHM510-LINK | SERIES

POWERLINK ABSOLUTE MULTI-TURN ENCODERS



MHM510-LINK, THE STANDARD Ø 58 MM ENCODER WITH POWERLINK TRANSMISSION

- Compact and robust design
- Ø 10 mm shafted version
- Precision bearing with seal
- High performance at temperatures up to 60°C
- Encoder disc made of durable unbreakable material
- Mechanical count of the number of revolutions per gear
- Resolution: 13-bit = 8,192 ppr (max. 16-bit)
- Number of revolutions: 12-bit = 4,096 revolutions (max. 14-bit)
- Surge and reverse polarity protection
- Integrated SMC technology
- M12 connectors

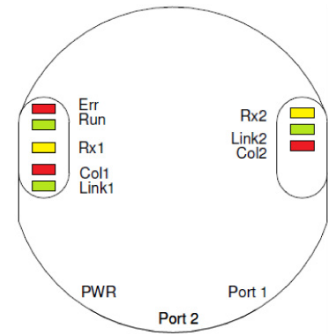
SPECIFICATIONS

MECHANICAL SPECIFICATIONS

Material (stainless steel option)	Cover: Aluminum	Vibrations (EN 60068-2-6)	≤ 10 g (10 Hz...1,000 Hz)	
	Base: Aluminum			
	Shaft: Stainless steel			
Maximum loads	Axial: 40 N	Weight (aluminum version)	700 g	
	Radial: 110 N	Operating temperature	0...60 °C	
Shaft inertia	≤ 30 g.cm ²	Storage temperature	-40...+85 °C	
		Relative humidity	98% non-condensing	
Torque	≤ 3 N.cm	Degree of protection	Cover: IP65	
			Base: IP64	
Speed (max. continuous)	6,000 rpm	Theoretical mechanical life 10⁹ revolutions (F_{axial}/F_{radial})		
Shock resistance (EN 60068-2-27)	≤ 100 g (half sine, 6 ms)	40 N/60 N	40 N/80 N	40 N/110 N
		25	10	4
Shock resistance (EN 60028-2-29)	≤ 10 g (half sine, 16 ms)			

DIAGNOSIS VIA LEDS

LED	Color	Description of LED on
Rx1	Yellow	Inbound and outbound traffic – port 1
Link 1*	Green	Connected to another Ethernet component – port 1
Collision 1*	Red	Ethernet collision - port 1
Rx2+*	Yellow	Inbound and outbound traffic – port 2
Link 2*	Green	Connected to another Ethernet component – port 2
Collision 2*	Red	Ethernet collision - port 2
Error*	Red	-
Run*	Green	-



* A1 versions only

PROGRAMMABLE SETTINGS

Direction of code change	Used to set whether the code increases with a clockwise turn and decreases with a counterclockwise turn, or vice versa.
Resolution (number of positions per revolution)	The resolution parameter is used to program the desired number of steps per revolution. Any value between 1 and the physical resolution of the encoder (8,192 as standard) is programmable.
Global resolution "Max-Range"	This is the total resolution required on the measurement scale. This value should not exceed the maximum encoder resolution (25-bit: 33.554.432).
Reset to value X	The preset value represents the desired position value at any position on the axis. This parameter is used to set the desired value at the desired location.

INTERFACE

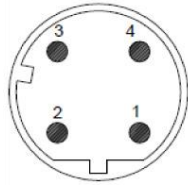
The node number is configured using 2 rotary switches (between 1 and 239).

Ethernet Powerlink

4-pin female, D-coded

Pin	Signal
1	Tx+
2	Rx+
3	Tx-
4	Rx-

Encoder view

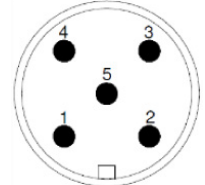


Power supply

5-pin male, A-coded

Pin	Signal
1	VS (10-30 VDC)
2	VS (10-30 VDC)
3	0 V
4	0 V
5	PE

Encoder view



REFERENCE

(Special versions available on request, e.g. special flange/electronics/connections, etc.)

MHK5	E1: EPL V1 E2: EPL V2	A1	B	12	13	C	10	0	PRM
Absolute multi-turn encoder	Powerlink version	Version	Code: Binary	Number of revolutions: 2 ¹² (4,096)	Resolution in the revolution: 2 ¹³ (8,192)	Standard flange	Shaft diameter: 10 mm	Without mechanical option	M12 connector

Made in France

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