

EMI 38 F / G

MAGNETIC INCREMENTAL BLIND HOLLOW SHAFT ENCODER



Specifications

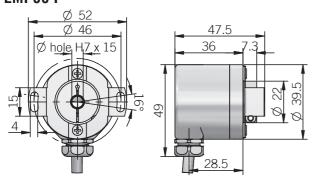
Thanks to the magnetic technology, the EMI 38 series is suitable for harsh environment applications such as marble and glass working machines, washing systems and generally for industrial automation.

- $\cdot\,$ 3 channel encoder (A / B / Z) up to 2048 ppr
- · Power supply up to +28 VDC with several electronic interfaces available
- · Cable output, connector available on cable end
- · Compact dimensions
- · Blind hollow shaft diameter up to 10 mm with shaft fixing by collar clamping
- · Sturdy construction due to separated chambers design
- · Wide operating temperature -25° ... +100°C (-13° ... +212°F)

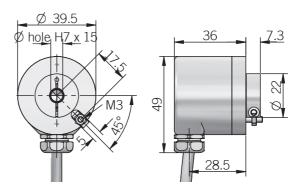
ORDERING CODE	EMI	38F	1024	Z	5	L	6	X	6	PR	. XXX
ORDERING CODE	SERIES magnetic incremental encoder series EMI blind hollow shaft with stator cou blind hollow shaft with antirotation	MODEL pling 38F n pin 38G RES ppr from 1 r pulses at	GOLUTION 2 to 2048 vailability ZEF without zer with zer electronic c interface	RO PULSE o pulse S o pulse Z POWEI interface)) 8 24 V 5 28 V ELEC	R SUPPLY 5 V DC 5 7 DC 8/24 7 DC 5/28 TRONIC IN pu ted (AEIC-	ITERFACE ISh-pull P 7272) PC ISHAFT D 9,52 (3/5	IAMETER mm 6 mm 8 3") mm 9 mm 10			PR	. XXX
								IX ROTATIO (IP 66) 30 (IP 64) 60			
							cable radia	al (standa	OUTP rd length 0	,5 m) PR	
									-	custom vei	VARIAN



EMI 38 F



EMI 38 G



ELECTRICAL SPECIFICATIONS		
Resolution	from 2 to 2048 ppr	
Power supply	5 = 4,5 5,5 V DC 5/28 = 4,75 29,4 V DC 8/24 = 7,6 25,2 V DC (reverse polarity protection)	
Current consumption without load	80 mA max	
Max load current	15 mA / channel	
Output type*	push-pull / line driver	
Max output frequency	205 kHz	
Counting direction	A leads B clockwise (shaft view)	
Accuracy	\pm 0,35° typical / \pm 0,50° max	
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-4	

^{*}output levels according to power supply, for further details please see under Technical basics section

RESOLUTIONS

2 - 4 - 8 - 10 - 16 - 20 - 32 - 40 - 64 - 80 - 100 - 125 - 128 - 200 - 250 - 256 - 400 - 500 - 512 - 1024 - 2048

CONNECTIONS		
Function	Cable output Push-pull	Cable output Line driver
+V DC	red	red
0 V	black	black
Ch. A	green	green
Ch. A-	/	brown
Ch. B	yellow	yellow
Ch. B-	/	orange
Ch. Z	blue	blue
Ch. Z-	/	white
<u>+</u>	shield	shield

MECHANICAL SPECIFICATIONS			
Shaft diameter	ø 6* / 8* / 9,52 (3/8") / 10 mm		
Enclosure rating	X = IP 64 (IEC 60529) S = IP 66 (IEC 60529)		
Max rotation speed	3000 rpm (IP 66) 6000 rpm (IP 64)		
Max shaft load	5 N axial / radial		
Shock	50 G, 11 ms (IEC 60068-2-27)		
Vibration	10 G, 10 2000 Hz (IEC 60068-2-6)		
Moment of inertia	$0,25 \times 10^{-6} \text{kgm}^2$		
Starting torque (at +20°C / +68°F)	< 0,02 Nm		
Fixing torque for collar clamping	0,6 Nm recommended		
Body material	EN-AW 2011 aluminum		
Shaft material	1.4305 / AISI 303 stainless steel		
Housing material	painted aluminum		
Bearings 2 ball bearings			
Bearing lifetime	10 ⁹ revolutions		
Operating temperature	-25° +100°C (-13° +212°F)		
Storage temperature	-25° +85°C (-13° +185°F)		
Weight	150 g (5,29 oz)		