

MAIN FEATURES

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.

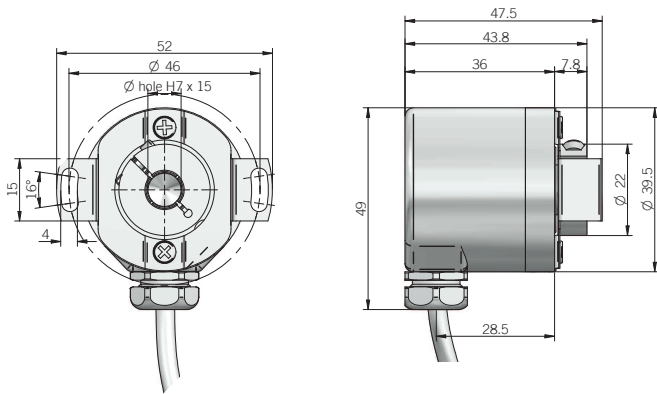
- Up to 2048 ppr
- Several output types available
- Up to 100°C working temperature
- Radial cable output
- Up to IP 66 as protection grade



ORDERING CODE

EMI 38	F	1024	Z	5	L	6	X	6	PR	.	XXX
SERIES magnetic incremental encoder EMI	SIZE mm 38	FIXING TYPE blind hollow shaft with spring F blind hollow shaft with anti-rotation pin G	RESOLUTION (only powers of 2) ppr from 2 to 2048 ppr 10 / 20 / 25 / 40 / 50 / 80 / 100 / 125 / 200 / 250 / 400 / 500 <i>please directly contact our offices for pulses availability</i>	ZERO PULSE without zero pulse S with zero pulse Z	POWER SUPPLY 5 V DC 5 5 ... 28 V DC 5/28 8 ... 24 V DC 8/24 <i>line driver available only with 5 V DC or 8 ... 24 V DC power supply</i>	ENCLOSURE RATING X IP 64 S IP 66	SHAFT DIAMETER 6 mm 8 mm 9 mm \varnothing 9,52 (3/8") 10 mm	ELECTRONIC INTERFACE P push-pull L line driver	VARIANT XXX custom version	OUTPUT TYPE PR cable output radial with SKINTOP® (standard length 0.5 m)	MAX ROTATION SPEED 3 3000 rpm (with IP66) 6 6000 rpm (with IP64)

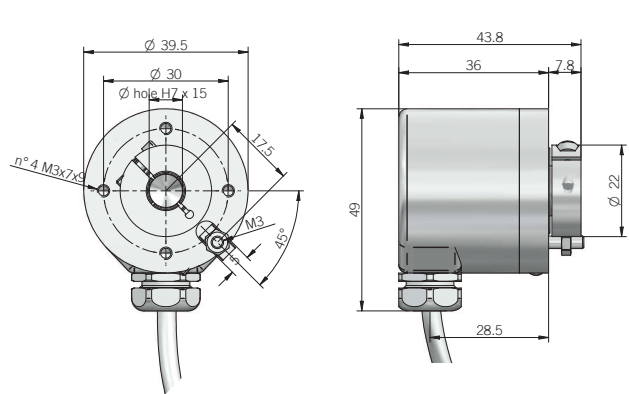
EMI 38 F



EL38F mounting instructions

1. Couple encoder shaft with motor shaft
2. Fix spring to motor flange without tightening it
3. Fix encoder shaft on motor shaft
4. Turn encoder for electrical adjustment (phasing)
5. Fix spring

EMI 38 G



EL38G mounting instructions

1. Fix anti-rotation pin on motor flange
2. Couple encoder shaft with motor shaft, making sure pin is inserted in the hole on the front part of the encoder (maintaining a minimum distance of 0.5 mm).
3. Fix encoder shaft on motor shaft

Mechanical specifications

Shaft diameter	∅ 6 / 8 / 9,52 / 10 mm
Enclosure rating	IP 64 (IEC 60529) IP 66 (IEC 60529)
Max rotation speed	6000 rpm 3000 rpm with IP66
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
Body material	aluminum UNI 9002/5
Shaft material	stainless steel UNI X10CrNiS1809
Housing material	painted aluminum
Bearings	2 ball bearings
Bearing lifetime	10 ⁹ revolutions
Operating temperature	-25° ... +100°C
Storage temperature	-25° ... +85°C
Weight	100 g

Electrical specifications

Resolution	up to 2048 ppr
Power supply	5 V DC ± 10% 5 ... 28 V DC ± 5% 8 ... 24 V DC ± 5%
Current consumption without load	80 mA max
Max load current	15 mA for channel
Electronic interface	push-pull line driver HTL / RS422
Max output frequency	205 kHz
Counting direction	A leads B clockwise (shaft view)
Accuracy	± 0.35° max
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-3

Connections and standard colours

Function	Wire colours
0 Volt	black
+ Vdc	red
Ch. A	green
Ch. B	yellow
Ch. Z	blue
Ch. A -	brown
Ch. B -	orange
Ch. Z -	white
⊥	shield