

Main features

Miniaturized \varnothing 38 encoder series. Recommended when a minimal size is required even providing excellent performances.

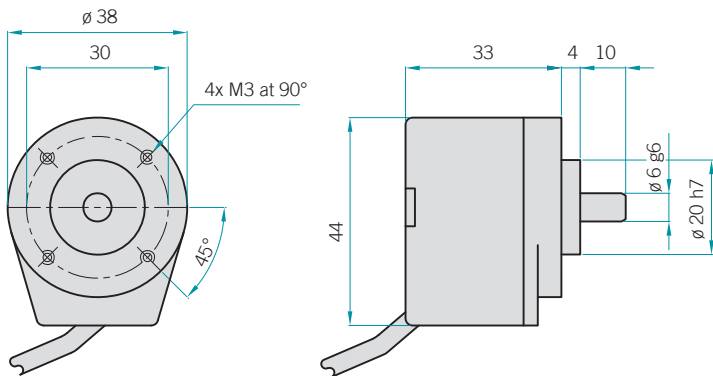
- Up to 1024 ppr with zero signal
- Several output types available
- Up to 24 V DC power supply
- Up to 100 kHz output frequency
- Cable output. Cable with connector at the end available on demand
- Several flanges available
- Up to 3000 RPM rotation speed
- Up to IP54 sealing



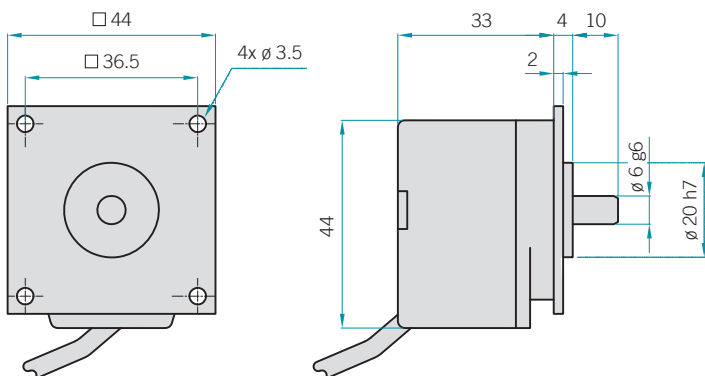
Ordering code

EH 38 A 500 Z 5 N 6 X 3 P R . XXX											
incremental encoder series EH		size 38								full stop to separate special versions	
Type of flange		EH 38 A model A		EH 38 B model B		EH 38 D model D		P cable output (standard length 0.5 m)		R radial	
		Resolution		ppr from 40 to 1024				Max. rotation speed		special version code numbered from 001 to 999	
				<i>please directly contact our offices for pulses availability</i>				3 3000 RPM			
		Zero pulse		without zero pulse S		with zero pulse Z		Enclosure rating			
								X IP54			
		Power supply		5 V DC 5		8÷24 V DC 8/24		Shaft diameter			
								6 \varnothing 6 mm			
								Output type			
								N NPN			
								C NPN open collector			
								P push-pull			
								L line driver			
										<i>please refer to page 92 for options about output types</i>	

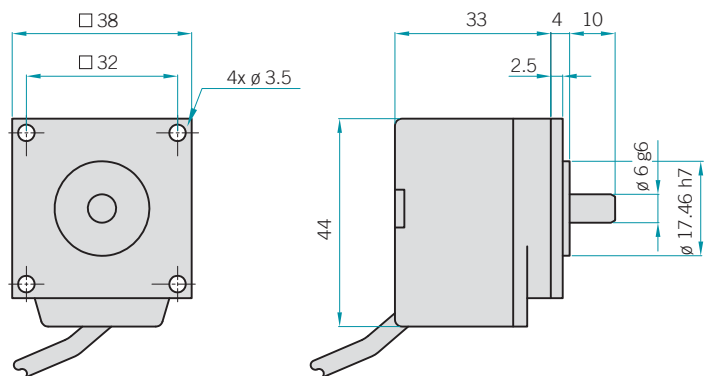
EH 38 A



EH 38 B



EH 38 D



Electrical specifications

Resolution	from 40 to 1024 ppr
Power supply	5 V DC 8÷24 V DC
Current consumption without load	100 mA max.
Max. load current	50 mA for channel 20 mA for channel (line driver)
Output type	NPN / NPN open collector push-pull / line driver
Max. output frequency	100 kHz
Operating frequency	$F = \frac{\text{RPM} \cdot \text{Resolution}}{60}$

Mechanical specifications

Shaft diameter	ø 6 mm
Enclosure rating	IP54
Max. rotation speed	3000 RPM
Max. shaft load	5 N (0.5 kgf) axial 5 N (0.5 kgf) radial
Shock	50 G, 11 ms
Vibration	10 G, 10÷2000 Hz
Bearing life	10 ⁹ revolutions
Bearings	2 ball bearings
Shaft material	stainless steel UNI X10CrNiS1809
Body material	aluminium UNI 5076
Housing material	PA66 glass fiber reinforced
Operating temperature	0÷60 °C
Storage temperature	-25÷70 °C
Weight	100 g