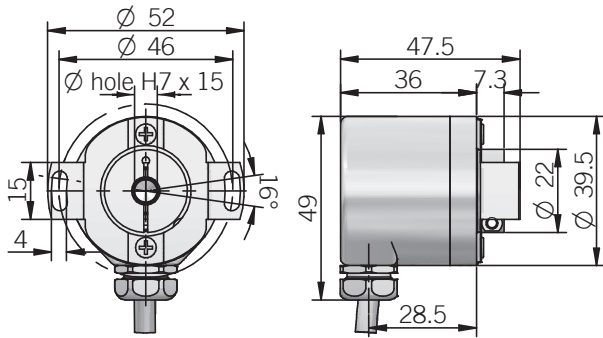
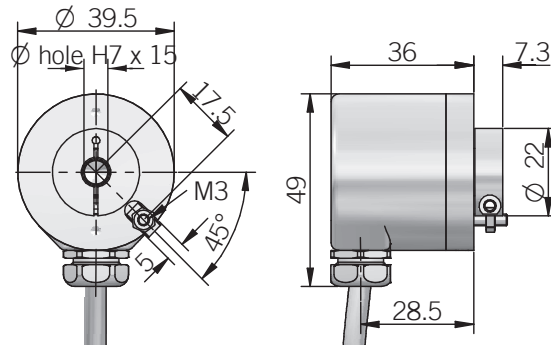




## EMI 38 F



## EMI 38 G



### ELECTRICAL SPECIFICATIONS

<b>Resolution</b>	from 2 to 2048 ppr
<b>Power supply</b>	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)
<b>Current consumption without load</b>	80 mA max
<b>Max load current</b>	15 mA / channel
<b>Output type*</b>	push-pull / line driver
<b>Max output frequency</b>	205 kHz
<b>Counting direction</b>	A leads B clockwise (shaft view)
<b>Accuracy</b>	± 0,35° typical / ± 0,50° max
<b>Electromagnetic compatibility</b>	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
⊥	shield	shield

### MECHANICAL SPECIFICATIONS

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