



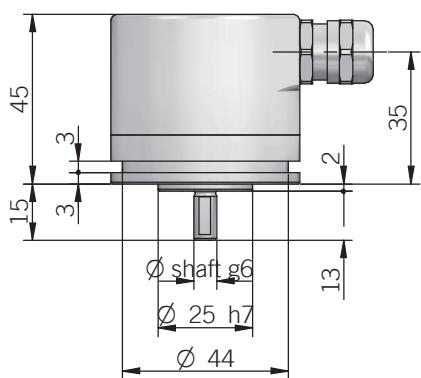
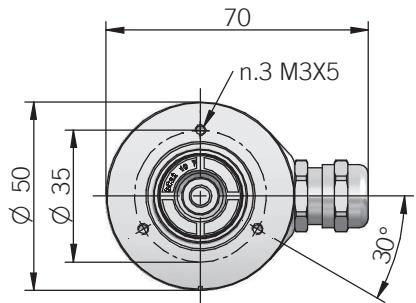
Eltra[®]
sensing technology



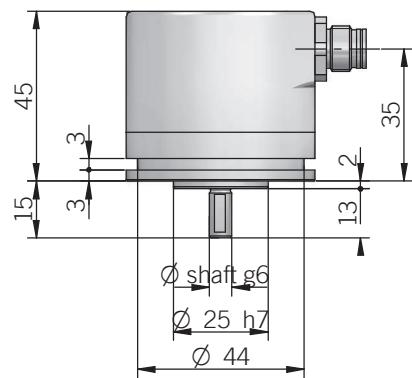
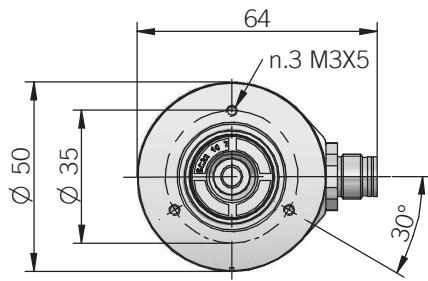
EML 50 A 360 X 5 V 05 X 6 X 3 P R . XXX

EML 50 A / AV / B / BY

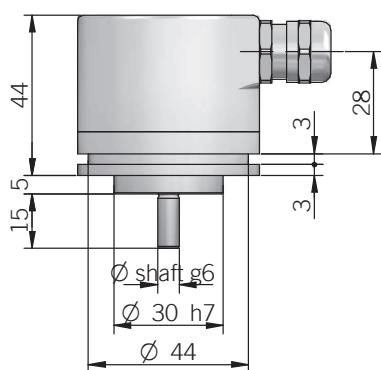
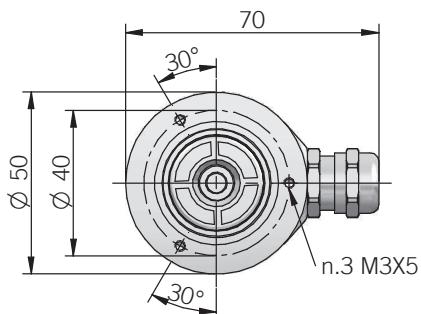
EML 50 A / AY
radial cable output



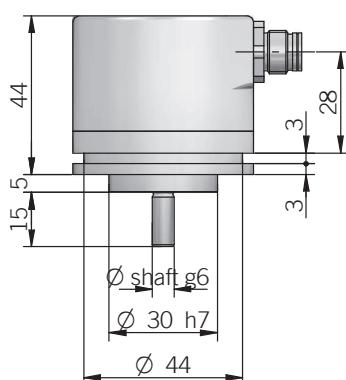
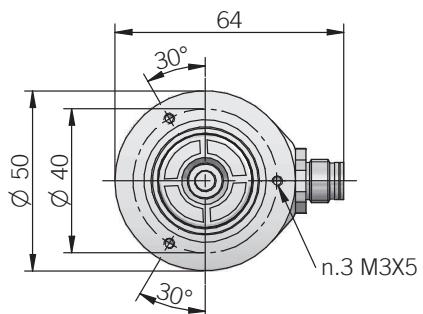
EML 50 A / AY
radial M12 output



EML 50 B / BY
radial cable output



EML 50 B / BY
radial M12 output

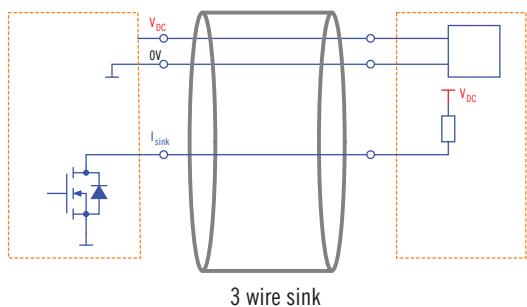




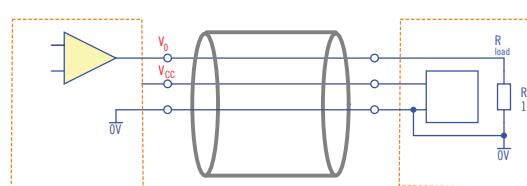
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ELECTRONIC INTERFACE

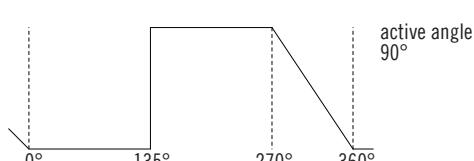
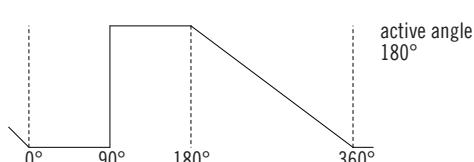
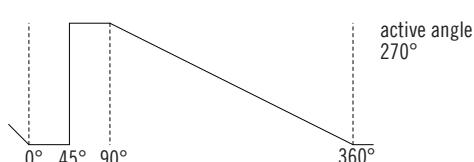
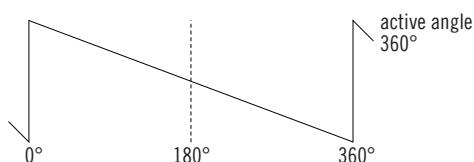
Current output



Voltage output



Signal pattern



Electrical specifications

Resolution	12 bits per revolution
Accuracy	± 0,35° max
Active angle	90 ... 360 mechanical degrees
Power supply	5 V DC ± 5%
	12 ... 28 V DC ± 5%
	reverse polarity protection
Current consumption without load	40 mA max
Signal pattern	decreasing with clockwise rotation (shaft view)
Auxiliary inputs (U/D - Reset)	active high (+Vdc) connect to 0V if not used / Reset t_{min} 150 ms
Electronic interface	analogue linear voltage output (0 ... 5 V / 0 ... 10 V) analogue linear current output (0 ... 20 mA / 4 ... 20 mA)
Load	$R_{min} = 1 \text{ k}\Omega$ (voltage output) $R_{max} = (V_{DC} - 2) / 0.02$ (current output)
Linearity error	< 0,1%
Start-up time	150 ms
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-3

Mechanical specifications

Shaft diameter	6 / 8 / 9.52 / 10 mm
Enclosure rating	IP 65 (standard) (IEC 60529) IP 67 (optional) (IEC 60529)
Max rotation speed	3000 rpm continuous 5000 rpm peak
Max shaft load	30N (3 Kgf) axial 50N (5 Kgf) radial
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	10 G, 10÷2000 Hz (IEC 60068-2-6)
Bearings	n° 2 ball bearings
Bearings life	10 ⁶ revolutions
Shaft material	stainless steel UNI X10CrNiS1809
Body material	aluminium UNI 9002/5
Housing material	aluminium UNI 9002/5
Operating temperature	-25° ... +85 °C
Storage temperature	-25° ... +85 °C
Weight	200 g

Electrical connections

Function	Wire colour (voltage output)	Wire colour (current output)	M12 Connector (5-pin)
+V DC	red	red	2
0 V	black	black	4
V _{out}	green	/	3
I _{in}	/	yellow	3
RESET	white	white	1
U / D	blue	blue	5
±	shield	shield	/

M12 connector (5-pin) (front view)

