

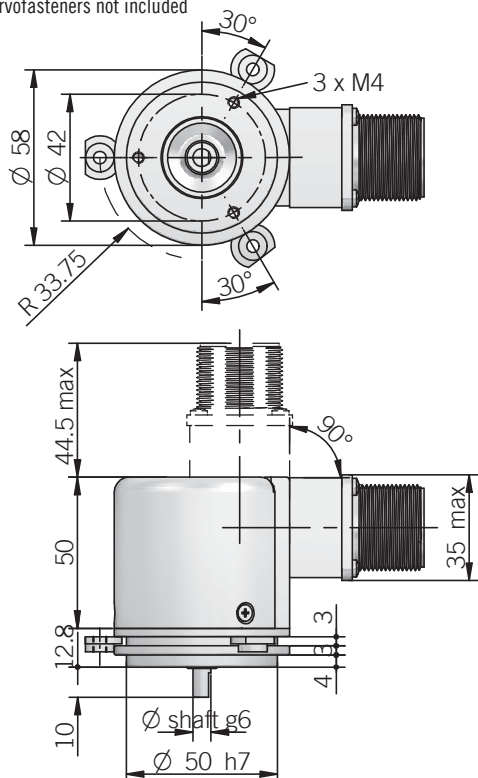
UNI EN ISO 9001:2008



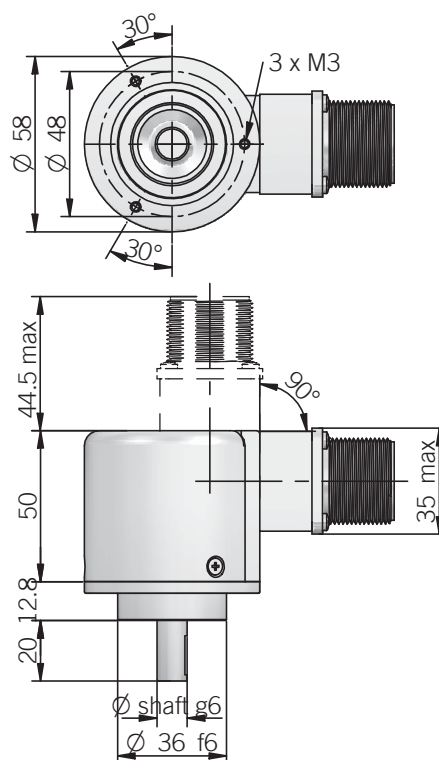
140409

EL - ER 58 B

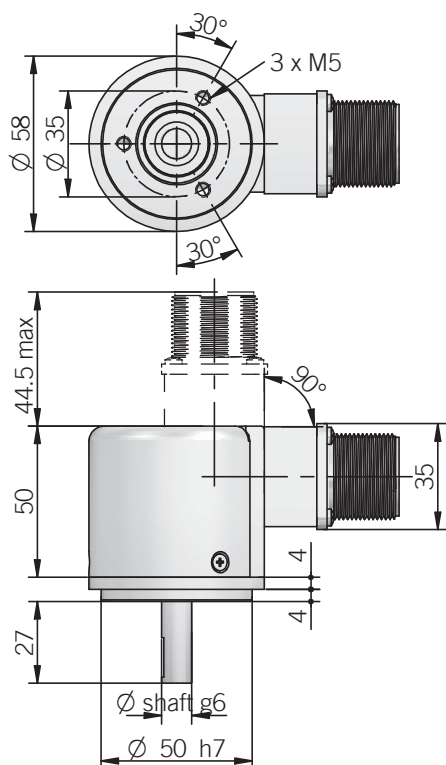
* servofasteners not included



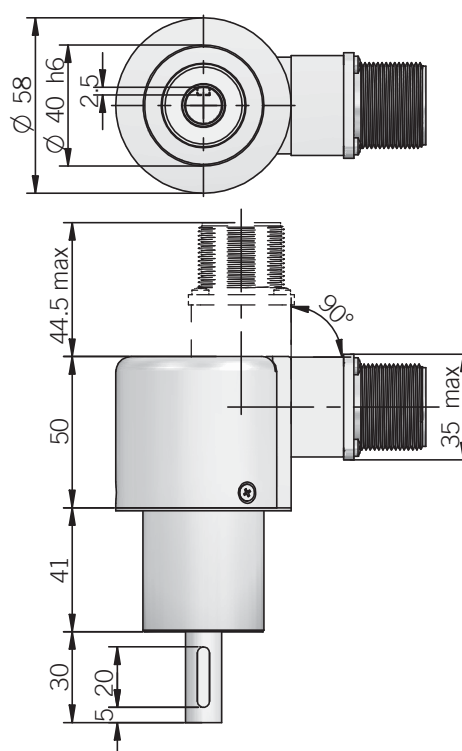
EL - ER 58 C



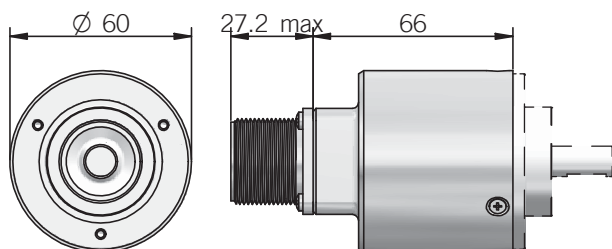
EL - ER 58 H



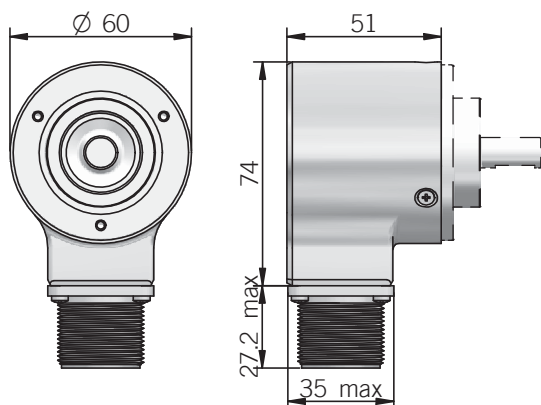
EL - ER 58 T



Dimensions with metal cover axial output



Dimensions with metal cover radial output



ER series resolutions

100 - 120 - 128 - 150 - 200 - 240 - 250 - 256 - 300 - 360 - 400 - 480
 - 500 - 512 - 600 - 625 - 720 - 750 - 800 - 900 - 1000 - 1024 - 1200 - 1250
 - 1440 - 1500 - 1600 - 1800 - 2000 - 2048 - 2500

EL series resolutions

1 - 2 - 4 - 5 - 10 - 15 - 16 - 20 - 25 - 30 - 32 - 40 - 50 - 60 - 70 - 80 - 90
 - 160 - 180 - 350 - 450 - 660 - 700 - 3000 - 3600 - 4000 - 4096 -
 5000 - 6000 - 7200 - 8000 - 8192 - 9000 - 10000 - 10240 - 12000
 - 14400 - 16000 - 16384 - 18000 - 20000 - 20480 - 24000

Electrical specifications

Resolution	from 1 to 24000 ppr
Power supply	5 V DC $\pm$ 10% 5 ... 28 V DC $\pm$ 5% 8 ... 24 V DC $\pm$ 5% (reverse polarity protection)
Power draw without load	800 mW
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	300 kHz
Counting direction	A leads B clockwise (shaft view)
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-4

Mechanical specifications

Shaft diameter	$\varnothing$ 6 / 8 / 9,52 (3/8") / 10 mm (EL 58 B / C / H) $\varnothing$ 10 / 12 mm (EL 58 T)
Enclosure rating	IP 54 (IEC 60529) IP 66 (IEC 60529)
Max rotation speed	3000 rpm 6000 rpm (only with IP 54)
Max shaft load	10 N (1 kgf) axial with $\varnothing$ 6 mm shaft 20 N (2 kgf) radial with $\varnothing$ 6 mm shaft 200 N (20 kgf)
Shock	50 G, 11 ms up to 2500 ppr (IEC 60068-2-27) 20 G, 11 ms from 3000 ppr (IEC 60068-2-27)
Vibration	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
Body material	EN-AW 2011 aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	PA 66 glass fiber reinforced / painted aluminum
Bearings	2 ball bearings
Bearings life	10^9 revolutions
Operating temperature	-10° ... +60°C EL series -20° ... +70°C ER series
Storage temperature	-25° ... +70°C
Weight	300 g

Connections

Function	N / C / P cable output	Line driver cable output	Output J7 N / C / P	Output J7 Line Driver without Zero	Output M7 N / C / P	Output M7 Line Driver without Zero	Output J10 Line Driver with Zero	Output M10 Line Driver with Zero
+V DC	red	red	6	4	F	D	4 - 5	D - E
0 V	black	black	1	6	A	F	6	F
Ch. A	green	green	3	1	C	A	1	A
Ch. A-	/	brown	/	3	/	C	7	G
Ch. B	yellow	yellow	5	2	E	B	2	B
Ch. B-	/	orange	/	5	/	E	8	H
Ch. Z	blue	blue	4	/	D	/	3	C
Ch. Z-	/	white	/	/	/	/	9	I
$\varnothing$	shield	shield	7	7	G	G	10	J