



## Series 70 – 140

- ▶ Absolute rotary-encoder with a solid shaft diameter of 12 mm
- ▶ Housing diameter 102 mm, extrem robust design and high degree of protection
- ▶ Maximum resolution 10 Bit
- ▶ For highest mechanical requirements
- ▶ Low torque
- ▶ Accessories from page 78

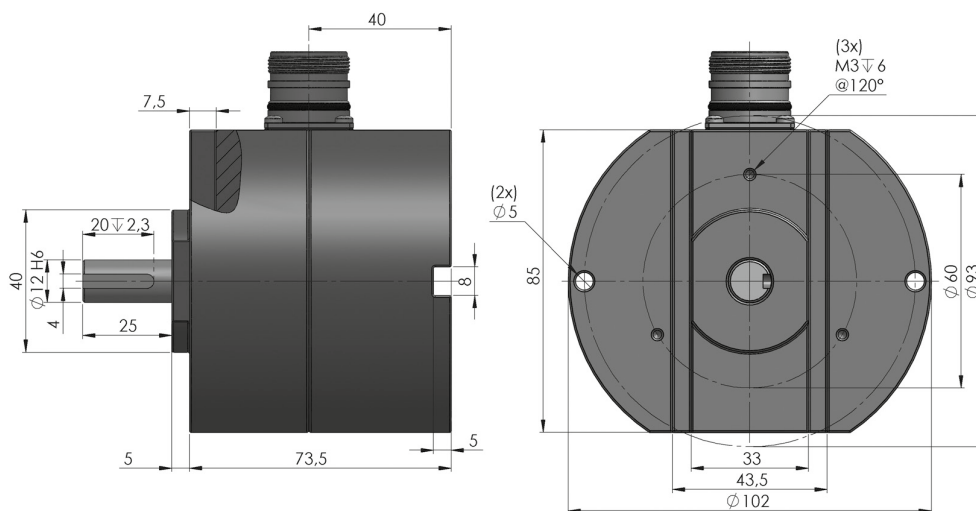
### Electrical specifications

max. pulse frequency:	25 kHz
Perm. temperature range:	-30°... +70° C
Power supply:	10 V... 30 V DC
Max. current consumption:	100 mA (without load)
Max. output load:	40 mA (per channel)
Residual ripple:	max. ± 5% U <sub>B</sub>

### Mechanical specifications

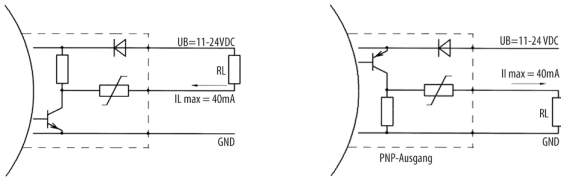
Housing:	Zinc die-casting
Shaft:	stainless steel
Bearing:	Deep groove ball bearing
Weight:	approx 1,2 kg
Protection type:	IP 54
Max. speed:	6.000 U/min
Torque:	approx 3 Ncm
Max. shaft load:	axial 30 N radial 50 N

### Mechanical dimensions



\* Tolerance = h 6  
All specification in millimeters

## Output circuits



Order ref.: NPN

PNP

## Output code

Output code	Resolution	Inputs
Binary, BCD	2, 4, 8, 16, 32, 64, 128, 256, 512, 1024	Counting direction switchover (looking at the shaft)
Gray (beginning with 0)	2, 4, 8, 16, 32, 64, 128, 256, 512, 1.024	Input open = right Input + $U_B$ = left
Gray excess (beginning $\neq$ 0)	45, 90, 180, 360, 720	

## Pin configuration

Connection type	BCD*		$10_0$				$10_1$				$10_2$				$10_3$	
	GND	+ $U_B$	1	2	4	8	1	2	4	8	1	2	4	8	1	2
F (12 pol.)	1	2	3	4	5	6	7	8	9	10	11	12	-	-	-	
F (16 pol.)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
K (00)	white	brown	green	yellow	gray	pink	blue	red	black	purple	gr/pin	bl/re	ws/gre	br/gre	ws/yel	yel/br

\* Binary, BCD, only 1024

## Order reference

