

Series 72

- ▶ Electronic multiturn rotary-encoder with a solid shaft diameter of 12 mm
- ▶ Housing diameter 102 mm, extem robust design and high degree of protection
- ▶ Resolution up to max. 3.600 divisions
- ▶ For highest industrial requirements
- ▶ Low torque
- ▶ 18-bit wider C'Mos counter
- ▶ Integrated accumulator
- ▶ Additional filter circuits
- ▶ Accessories from page 78

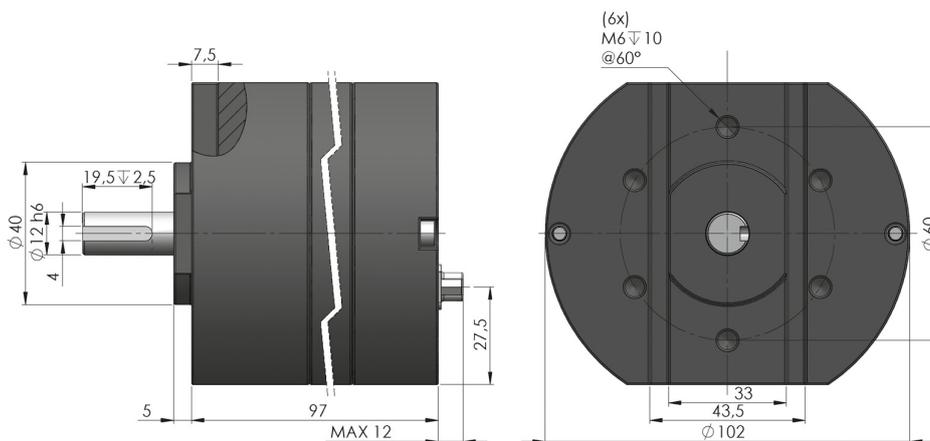
Electrical specifications

Max. step frequency:	25 kHz
Perm. temperature range:	-30°... +70° C
Power supply:	10 V... 30 V DC
Max. current consumption:	120 mA
Power failure safety:	max. 48 hrs.

Mechanical specifications

Housing:	Zinc die-casting
Flange:	Zinc die-casting
Shaft:	stainless steel 12 mm
Bearing:	Deep groove ball bearing
Weight:	approx 1,2 kg
Protection type:	IP 54 according to DIN 40050
Max. speed:	6.000 U/min
Moment of inertia:	270 gcm ²
Torque:	3 Ncm
Max. shaft load:	axial 10 N radial 10 N

Mechanical dimensions



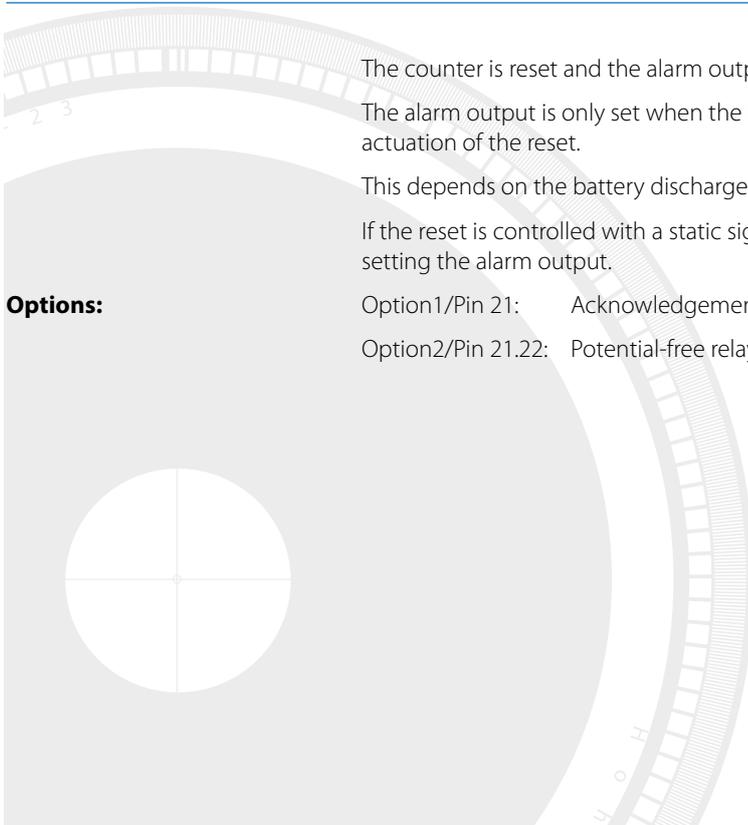
All specification in millimeters

Functional description of the control inputs

Pin	Desc.	Explanation
25 *	Reset Acknowledgement Alarm	A signal (+ Ub) resets the internal counter. The alarm output is acknowledged at the same time.
24 *	Code Selection of output code	A signal (+ Ub) switches the code type from binary to BCD code
23 *	Change of counting direction	A signal (+ Ub) changes the counting direction. Looking at the shaft: Sequence of numbers increasing for an anticlockwise shaft)
22	Alarm/Relay output Unilateral mass of switching	When the internal battery no longer has sufficient voltage and counting errors could arise, this is indicated by resetting the output. Furthermore, the internal power supply is monitored during operation.

* All control inputs are switched via octocoupler

Functional description of alarm output: (after applying the operating voltage)



Options:

The counter is reset and the alarm output is acknowledged by resetting.

The alarm output is only set when the battery voltage has exceeded a certain value during actuation of the reset.

This depends on the battery discharge and can take a few minutes.

If the reset is controlled with a static signal of + Ub, the release of the count is signalled by setting the alarm output.

Option1/Pin 21: Acknowledgement input for alarm signal independent of reset

Option2/Pin 21.22: Potential-free relay contact for alarm signal

Pin configuration type 72-140 U. . .

Pin	25-pole connector		Wire colour at cable output (DIN 47 100)
	Valence for binary code	Valence for BCD code	
1	–	–	white
2	+	+	brown
3	2^0	1	green
4	2^1	2	yellow
5	2^2	4	gray
6	2^3	8	pink
7	2^4	1	blue
8	2^5	2	red
9	2^6	4	black
10	2^7	8	purple
11	2^8	1	gray-pink
12	2^9	2	blue-red
13	2^{10}	4	white-green
14	2^{11}	8	brown-green
15	2^{12}	1	white-yellow
16	2^{13}	2	yellow-brown
17	2^{14}	4	white-gray
18	2^{15}	8	gray-brown
19	2^{16}	1	white-pink
20	2^{17}	2	pink-brown
21	Option	Option	white-blue
22	Alarm	Alarm	brown-blue
23	↔	↔	white-red
24	Binary / BCD	Binary / BCD	brown-red
25	Reset	Reset	white-black