Hall-Potentiometer
N10

The N10 is a Hall-Potentiometer for electrohydraulic and hoisting applications. Long life and high reliability is ensured by the latest contactless hall-technology. Up to 18 detent points can be integrated.

Technical data

Mechanical life N10	10 million operating cycles
Mechanical life with detent/friction brake	3 million operating cycles
Operating temperature	-40°C to +85°C
Degree of protection	IP67 (electronic)
Functional safety	PLd compatible (EN ISO 13849, complies SIL2 to DIN EN IEC 61508)

Example

N10	-90	1	-6	-E14811	-X

Basic unit

N10A	Hall-Potentiometer with rotary knob

Operating distance

360°	(rotating without stop)
270°	
180°	
90°	

Detent

0	Without detent, with friction brake
1	Detent point in middle position
3	Detent point in Position 1
4	Detent point in Position 2
R15	Detent point at intervals of 15°

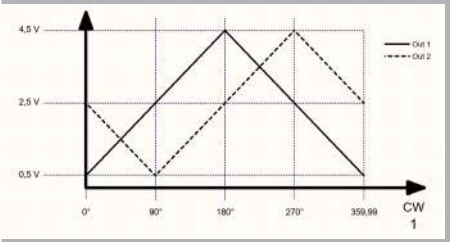
Dead zone around the center position

0	No dead zone
Example +/-3° => 6	

Interfaces

Voltage output

E1481	1	0,5...2,5...4,5 V dual inverse Ub= 5 V DC
	2	0,5...2,5...4,5 V dual positive gradient clockwise (cw) Ub= 5 V DC
	3	0,5...2,5...4,5 V dual positive gradient counter clockwise (ccw) Ub= 5 V DC
E1491	1	0,5...2,5...4,5 V positive gradient clockwise (cw) with zero position signal Ub= 5 V DC
	2	0,5...2,5...4,5 V positive gradient counter clockwise (ccw) with zero position signal Ub= 5 V DC
	3	0,5...2,5...4,5 V positive gradient clockwise (cw) with direction signals Ub= 5 V DC
	4	0,5...2,5...4,5 V positive gradient counter clockwise (ccw) with direction signals Ub= 5 V DC
E1531	1	0.5...2.5...4.5 V redundant triangular characteristic 90° offset Ub= 5 V DC

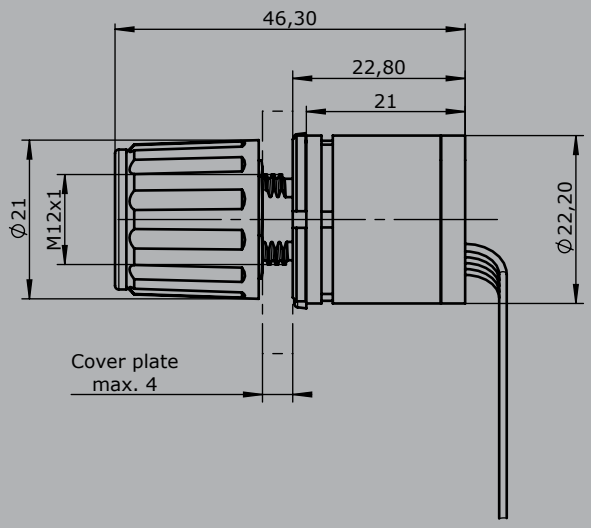


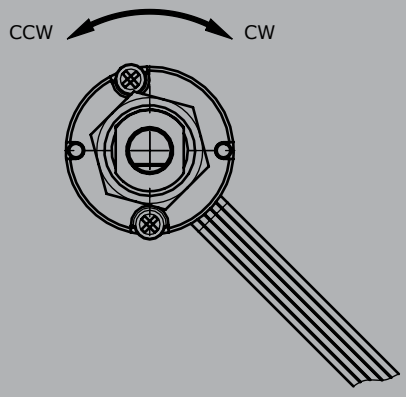
More interfaces (for example SPI Bus) on request!

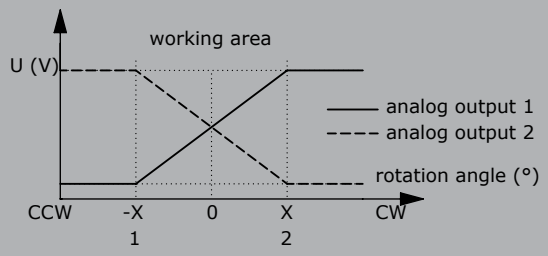
Special model

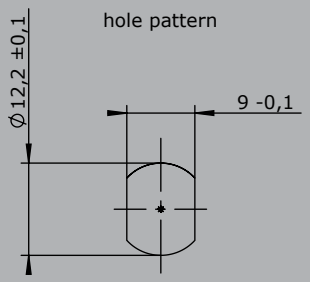
X	Special / customer specified

Technical details may vary based on configuration or application! Technical data subject to change without notice!









Position of the shaft:

detent in the middle position

detent in 1 figure -90°

detent in 2 figure +90°

V2025/2 17.03.2025