

MINICODI



TYPICAL APPLICATIONS	Electronic control for appliances
WIRING DIAGRAMAS	2-bit digital output (incremental function) - Up to 21 positions
CYCLE NR	10.000
AMBIENT TEMPERATURE	85 °C

Encoders display different dimensions and mounting systems on the control panel. Dimensions vary a lot depending on the different applications. MINICODI series as potentiometer can be coupled with selector switches.

Rating
20 mA / 5 VDC
T 85 °C

ADDITIONAL FEATURES

- Golden contacts
- 360° with or without end stop
- Different mounting solutions available:
snap-in or M4 screws or self tapping screws
- Push to select version available
- Coupling with function selector switches
- Miniature encoder
- 2-bit digital output (incremental function)
- Typical use for analogical / resistive applications
- Permitted angular tolerance: +/- 2°
- End stops: ≥ 100 Ncm
- Operating torque: custom
- Edge connectors

MINICODI - INCREMENTAL ENCODER

The mechanical encoder with digital output are available in absolute or incremental code. The shaft rotation, in the incremental output, generates pulses that, sent to the microprocessor, determine a “relative” position. The counts of pulses continue with the rotation of the shaft, which allows the position to change infinitely, or as the microprocessor allow. Direction may be determined by analyzing difference between the two channels.

Example of incremental encoder configuration with gray code

Detent	Ang.	Output		
		C	1	2
1	0°	■	■	
2	30°	■	■	■
3	60°	■		■
4	90°	■		
5	120°	■	■	
6	150°	■	■	■
7	180°	■		■
8	210°	■		
9	240°	■	■	
10	270°	■	■	■
11	300°	■		■
12	330°	■		

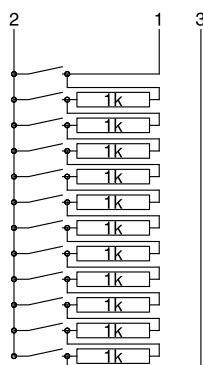
Example of incremental encoder obtained with momentary positions

Pos.	Ang.	Output	
		1	2
1 momentary	+30°	■	
0 stable	0		
2 momentary	-30°		■

MINICODI - POTENTIOMETER

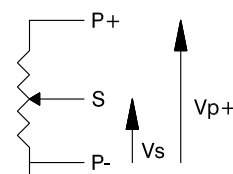
The potentiometer is a mechanical encoder with resistive analogical output. The potentiometer version can be implemented either using a continuous "carbon" layer or a resistor array. The potentiometer has a rotation that can be infinite or steps (positions). Push to select function available.

Potentiometer resistor array



Pos.	Ang.	2	
		1	3
1	0°	10K	11K
2	30°	1	10K
3	60°	2K	9K
4	90°	3K	8K
5	120°	4K	7K
6	150°	5K	6K
7	180°	6K	5K
8	210°	7K	4K
9	240°	8K	3K
10	270°	9K	2K
11	300°	10K	1K
12	330°	11K	10

Potentiometer carbon film



Value between P- and S		
Detent	Ang.	Output voltage %
1	0°	0%
2	35°	11%
3	70°	22%
4	105°	33%
5	140°	44%
6	175°	56%
7	210°	67%
8	245°	78%
9	280°	89%
10	315°	100%

endstop

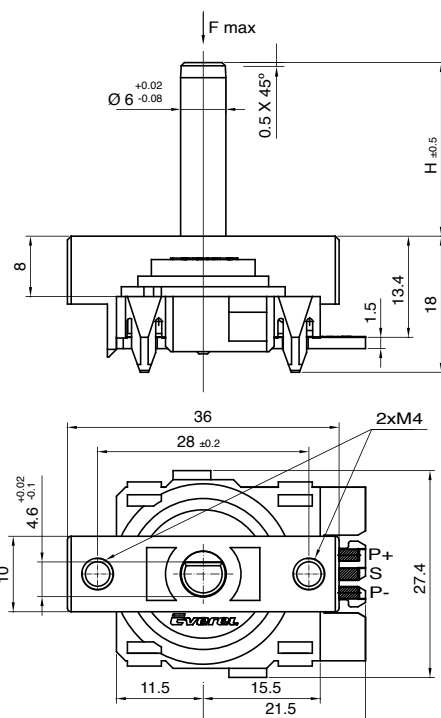
MS

MINICODI	FIXING TYPE	H SHAFT (mm)	NUMBER OF POSITIONS
MS1	Screw m4	11 13 16 18 20,4 23	- Free rotation 360° - Free rotation with mechanical stop - Positions number: min. 2 - max 21 with or without mechanical stop - Double momentary
MS2	Self tapping screw		

MS1



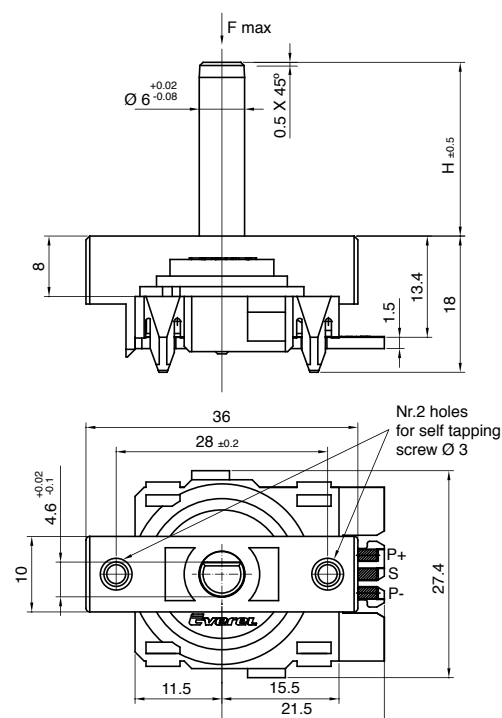
MS1



MS1 encoder, body standard version with M4 screw fixing type.

MS2

MS2



MS2 encoder, body standard version with self tapping screw fixing type.