Codi

04

CS 193

CV 194

CODI

TYPICAL APPLICATIONS	Electronic function selector Washing machines and dishwashers
WIRING DIAGRAMAS	■ 4-bit digital output ■ Up to 32 positions ■ BCD, Gray Code and resistor array selection
CYCLE NR	10.000
AMBIENT TEMPERATURE	85 °C

Designed with the special demands of today's electronic control applications in mind.
Everel encoders provide an outstanding array of potential solutions.

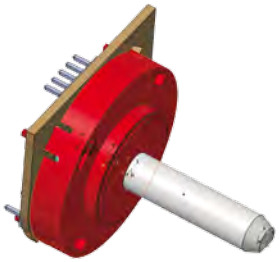
Rating
20 mA / 5 VDC
T 85 °C

ADDITIONAL FEATURES

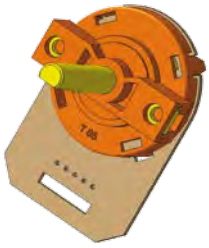
- Golden contacts
- 360° with or without end stop
- Permitted angular tolerance: +/-2°
- 10.000 cycles
- Operating torque: custom
- Different connecting systems
- Different mounting solutions available, such as snap-in, twist-lock or screws
- Coupling with function selector switches

SOLUTIONS

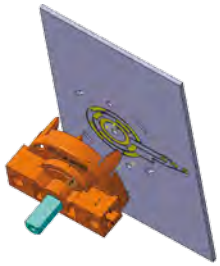
Screw mounting CODI
The encoder can be fixed to panel with a screw or a nut.



Pin strip connector CODI
It allows to weld the encoder directly on the circuit board of the customer product without wiring.



M4 screw mounting CODI
The encoder can be fixed on the panel by two M4 screws.

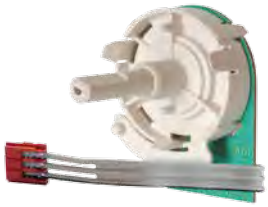


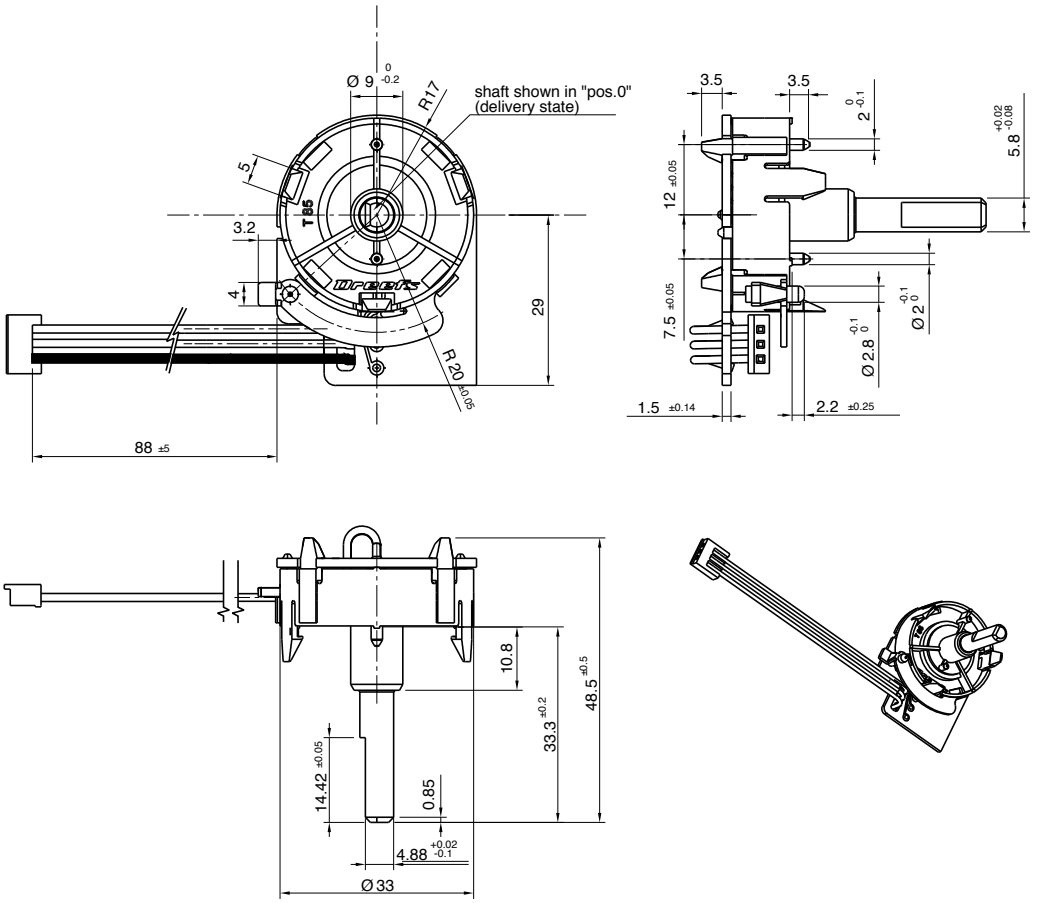
Version without PCB for mounting on PCB
Everel can also supply only the electromechanical part of the encoder allowing the customer to define the board circuit.

CS

CODI	FIXING TYPE	H SHAFT (mm)	NUMBER OF POSITIONS
CS	Snap-in	■ 22,5	■ 16 P

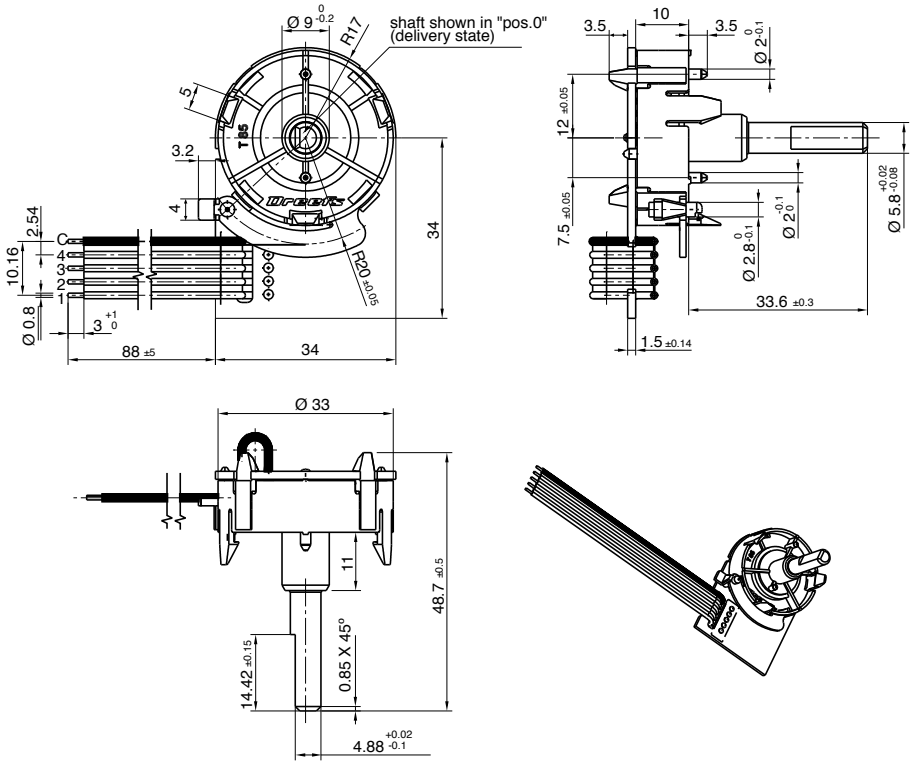
CS1





MF encoder, standard body version with snap in fixing type or self snapping fixing type.

CS2

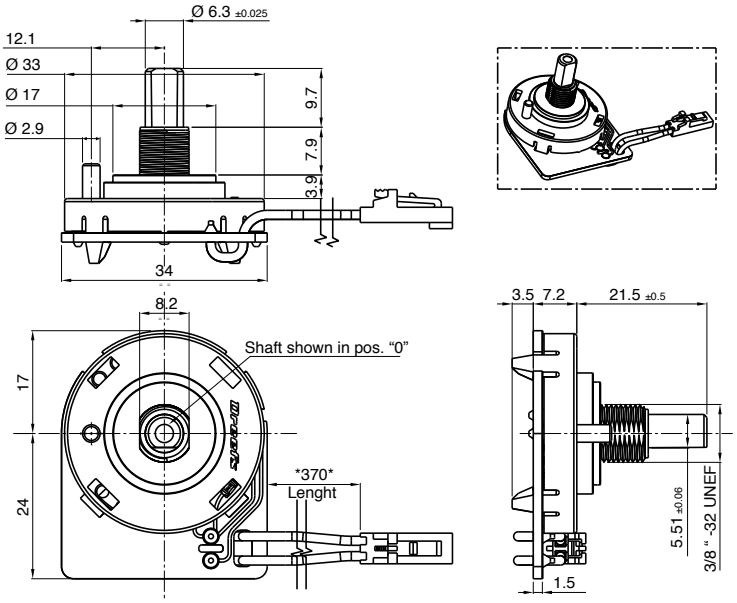


MF encoder, standard body version with snap in fixing type or self snapping fixing type.

CV

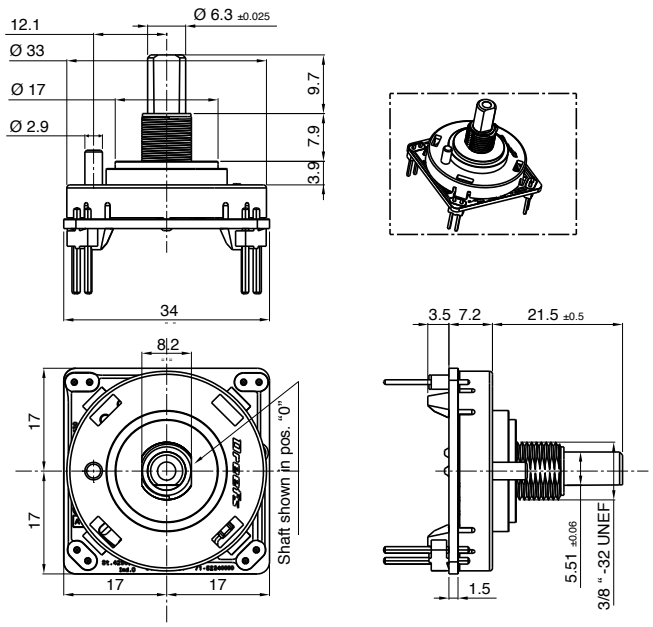
CODI	FIXING TYPE	H SHAFT (mm)	NUMBER OF POSITIONS
CS	Threaded ring	■ 9,7	■ 6 P + 180° free rotation

CV1



MF encoder, standard body version with snap in fixing type.

CV2



MF encoder, standard body version with snap in fixing type.

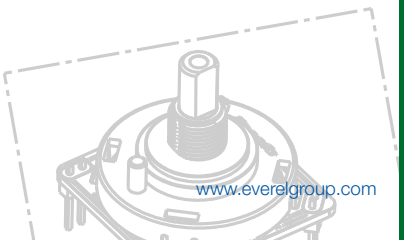
11
48.7 ±0.5
0.85 X 45°
14.42 ±0.15
4.88 +0.02 -0.1

Ø 6.3 ±0.025
12.1
Ø 33
Ø 17
Ø 2.9
9.7
7.9
3.9
34

3.5
7.2
21.5 ±0.5
1.5

8.2
Shaft shown in pos. “0”
17
370
Lenght
24

Ø 6.3 ±0.025
12.1
Ø 33
Ø 17
9.7
7.9

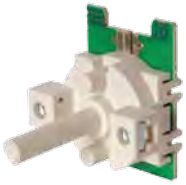


Minicodi

04

MS 199

MF 200



MB 200

MV 201

MK 202

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 serf 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°	■		

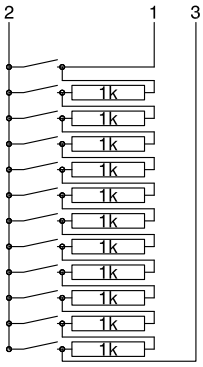
Example of incremental encoder obtained with momentary positions

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

MINICODI - POTENTIOMETER

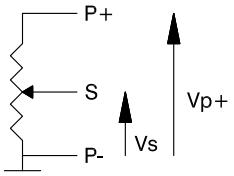
The potentiometer is a mechanical encoder with resistive analogical output. The potentiometer version can be implemented either using a continuous “carbon” layer or a resistor array. The potentiometer has a rotation that can be infinite or steps (positions). Push to select function available.

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		

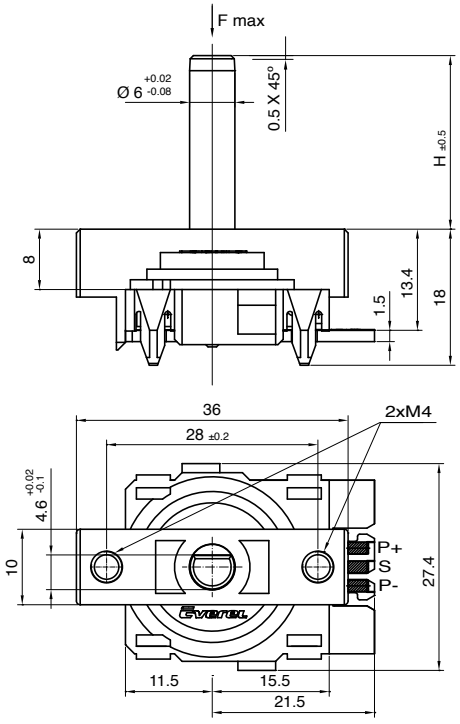
MS

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

MS1

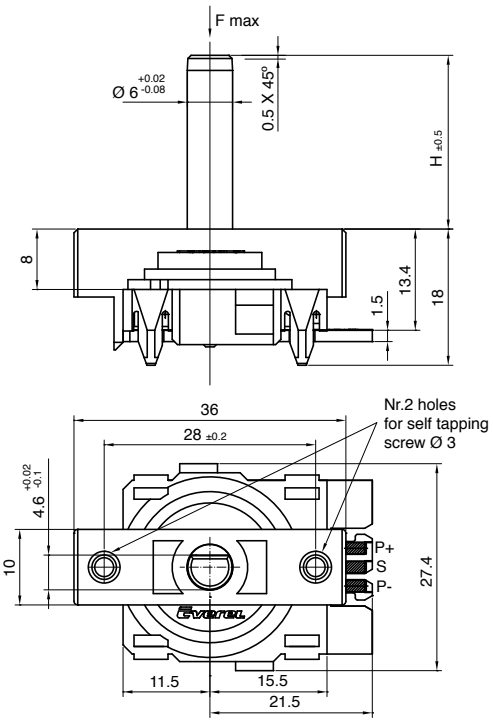
MS2

MS1



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

MS2

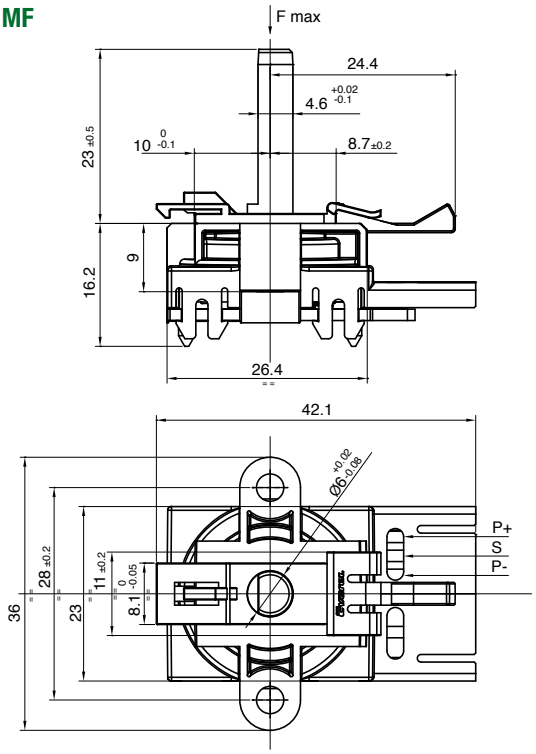


MS2 encoder, body standard version with self tapping screw fixing type.

MF

MINICODI	FIXING TYPE	H SHAFT (mm)	NUMBER OF POSITIONS
MF	■ Self tapping screw ■ Snap in	■ 23	■ 3 P ■ 6 P ■ 8 P ■ 10 P ■ 12 P

MF



MF encoder, version with snap in fixing type or self tapping fixing type.

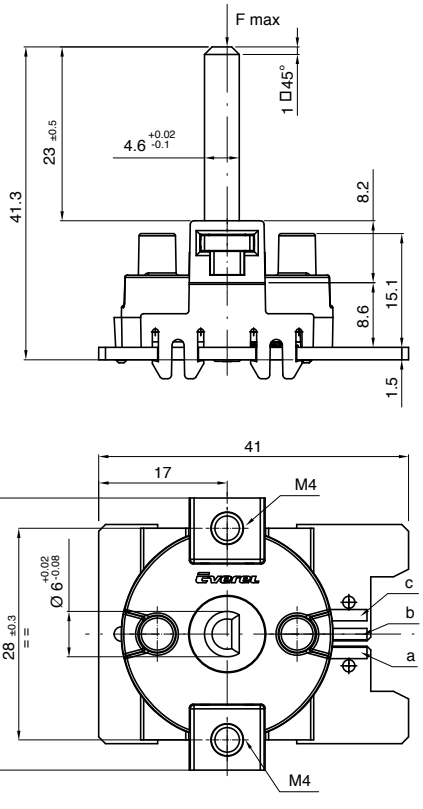
MB

MINICODI	FIXING TYPE	H SHAFT (mm)	NUMBER OF POSITIONS
MB1	Screw m4	■ 13,7 cross ■ 23	■ Free rotation with 1 position at 0° ■ Free rotation with 20 positions
MB2	Snap in		

MB1

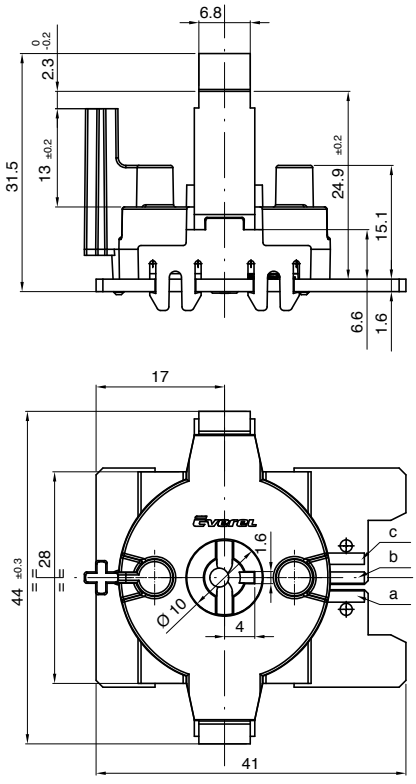
MB2

MB1



MB1 encoder, version with M4 screw fixing type.

MB2

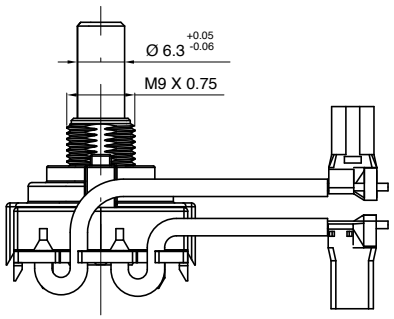


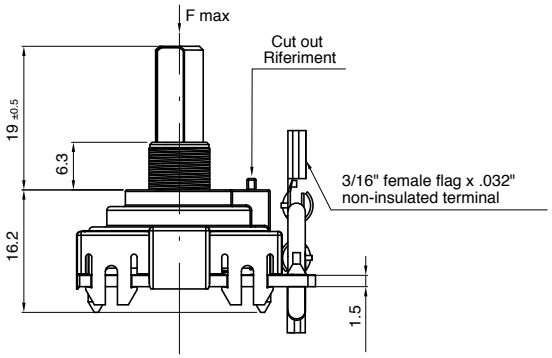
MB2 encoder, version with snap in fixing type.

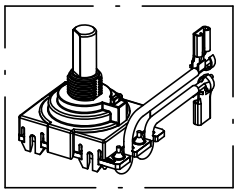
MV

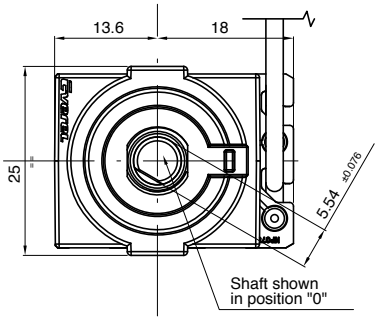
MINICODI	FIXING TYPE	H SHAFT (mm)	NUMBER OF POSITIONS
MV1	Threaded ring	■ 12,7	■ Free rotation 360° with stop
MV2	Soldering pin		

MV1

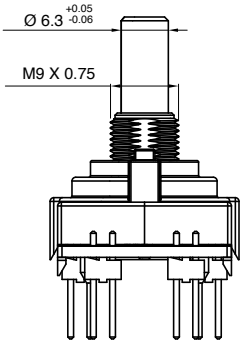


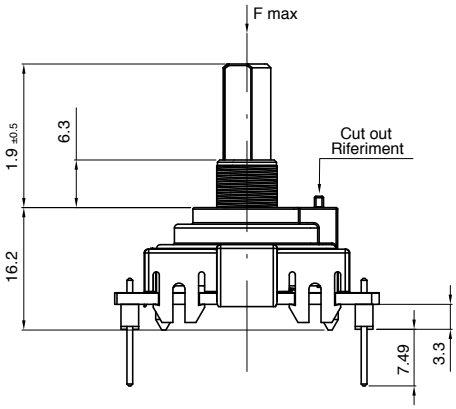


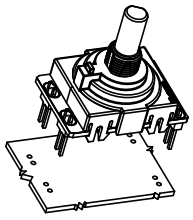


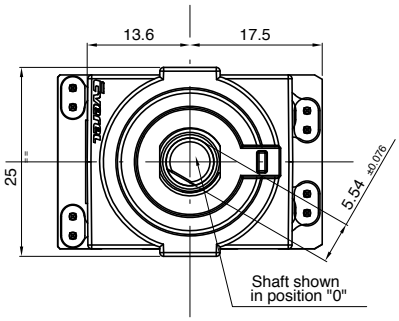


MV2





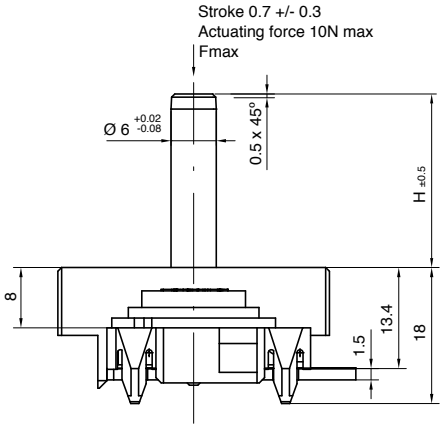




MK

MINICODI	FIXING TYPE	H SHAFT (mm)	NUMBER OF POSITIONS
MK1	Screw m4	■ 13 ■ 18,7	■ 21 positions free rotation ■ 20 positions free rotation
MK2	Self tapping screw	■ 23 ■ 24	■ Double momentary

SHAFT



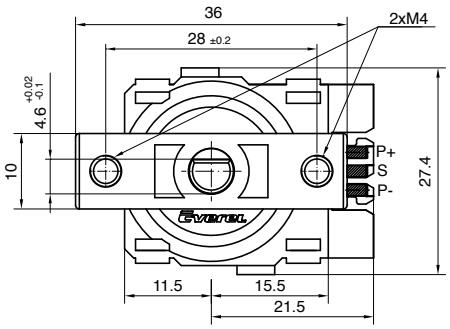
PUSH TO SELECT

The push to select accessory is used to select a scroll menu function and to confirm the selected value (i.e. temperature).

MK1

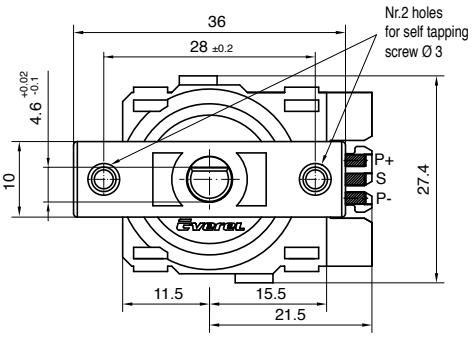
MK2

MK1



MK1 encoder, version with M4 screw fixing type.

MK2



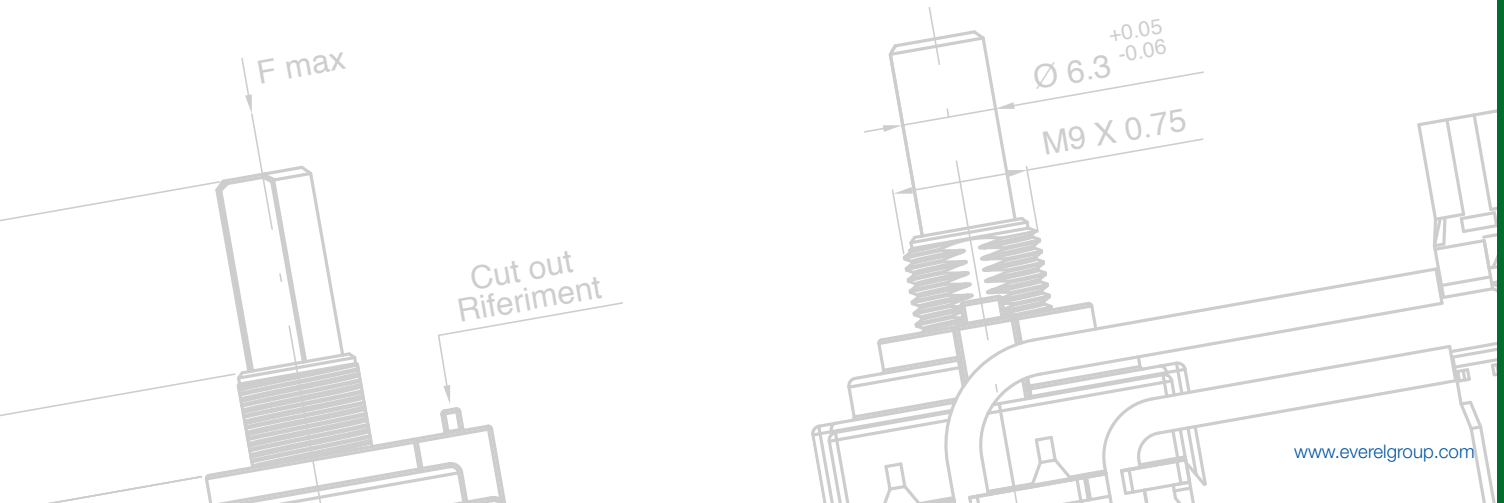
MK2 encoder, version with self tapping screw fixing type.

17
M4
c
b
a
36
28 ±0.3
Ø 6 +0.02 -0.08
M4

44 ±0.3
28
Ø 10

2xM4
36
28 ±0.2
4.6 +0.02 -0.1
10
P+
S
P-
27.4
15.5
11.5
21.5
18

4.6 +0.02 -0.1
10


F max
Cut out
Riferiment
Ø 6.3 +0.05 -0.06
M9 X 0.75