

## IDXYmP MkII & IDXYmP-ID3 MkII Series



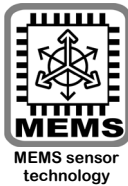
- Programmable micro controller device able to measure tilt on two axes
- Up to two supplementary outputs for axes or four for semi-axes
- MEMS technology (no moving parts). Can be mounted upside down.
- Safety level for IDXYmP: up to PL b (EN 13849-1)
- Safety level for IDXYmP-ID3: PL d (EN 13849-1)
- Could be factory programmed with custom configuration
- Programmable intervention range from -20 to +20 degrees
- Planarity output with free polarized relay contact or positive transistor
- Positive transistor axes or semi-axes outputs
- Hardware and software filtering to remove vibrations and noise
- Inputs and outputs protected against polarity inversion and short circuit
- Waterproof, sturdy, compact body (mineral filled Nylon 6)
- Easy setup with BPE software (RS-232 connection)
- Zero cable to store the device zero

**On request:**

- Digital input for second alarm level selection
- Auxiliary transistor output for pre-alarm function (instead axes and semi-axes outputs)

*Typical fields of application: mounted cranes, mobile cranes, aerial platforms, industrial automation and generic mobile machines.*

**Note: the user/installer is responsible for evaluating the values and, thus, the safety of the application**



MEMS sensor technology



PLd (EN 13849-1)



Intervention range ±20°



Protection Grade IP66/IP67



Easy PC setup with BPEterminal



Until -40°C



Vertical mounting



Four semi-axes



Automatic levelling

### Technical data

	Transistor ID output	Relay ID output
Power supply	9 to 33 V <sub>DC</sub>	12 V <sub>DC</sub> : from 9 to 16.8 V <sub>DC</sub> @ 20°C <sup>(2)</sup> 24 V <sub>DC</sub> : from 18 to 33 V <sub>DC</sub> @ 20°C <sup>(2)</sup>
Axes and semi-axes outputs max current	1.5 A (2.5 A if only one output is activated) <sup>(3)</sup>	
Planarity output max current	Positive: 3.0 A <sup>(9)</sup>   Negative: 0.6 A	3.0 A <sup>(4)</sup>
Power draw	30 mA <sup>(5)</sup>	
Intervention range	from -20 degrees to +20 degrees on every axis	
Accuracy (@ TA=25°C)	1% FS	
Resolution	0.025 degrees	
Temperature drift (zero point)	±0.008 degrees/°C (typ.)	
Operating temperature	from -40 to +70 °C <sup>(6)</sup>	
Maximum weight	0.25 kg	
Housing material	mineral filled Nylon 6	
Sealing	two component polyurethane resin	
Standard protection grade	IP66 / IP67	
Standard cable length	45 cm	
Buzzer (Optional)	105dB, alternating tone, IP54	
CE conformity	EMC Directive: 2014/30/EU Machine Directive: 2006/42/EC	
EMC: Immunity   Emission	EN 61000-6-2 <sup>(7)</sup> , EN61000-6-3   EN 13309 <sup>(8)</sup>	
Vibration resistance – Sinus	EN 60068-2-6: 10 g, 10 to 150 Hz	EN 60068-2-6: 5g, 10 to 150Hz
Shock resistance – Shock	EN 60068-2-27: 200 g, 6 ms	EN 60068-2-27: 30g, 6ms
MTTFd	EN 13849-1: ≥ 100 years (for every channel) for the planarity transistor output version	

<sup>(1)</sup> Planarity relay output must be protect with an external fuse (not supplied)

<sup>(3)</sup> Mutually exclusive, maximum two contemporary enabled

<sup>(5)</sup> Without loads on the output

<sup>(7)</sup> Excluding Surge (EN 61000-4-5)

<sup>(9)</sup> I<sub>MAX</sub>=1.0 A if "Digital output" field is equal to "7" in the ordering code

<sup>(2)</sup> 12 V<sub>DC</sub>: from 10.2 to 16.2 V<sub>DC</sub> @ 70°C. 24 V<sub>DC</sub>: from 20.4 to 32.4 V<sub>DC</sub> @ 70°C

<sup>(4)</sup> Protected by external fast fuse

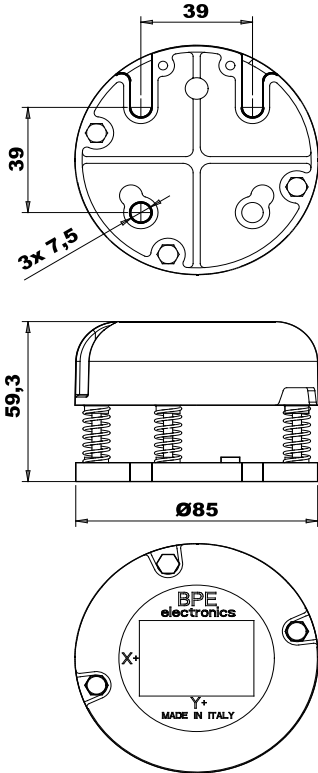
<sup>(6)</sup> From -20 to +70 °C for Cat. 3 or PL d versions (IDXYmP-ID3 MkII)

<sup>(8)</sup> Excluding Pulse 5 (ISO 7637)

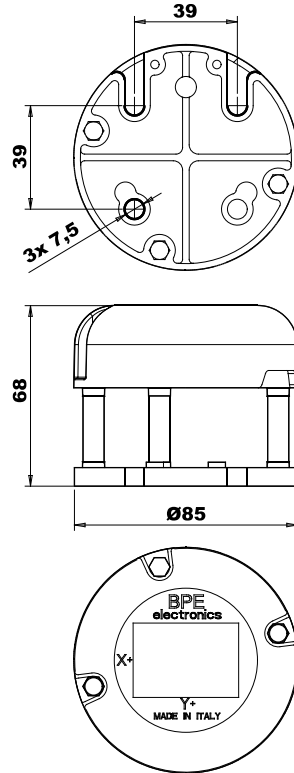


## IDXYmP MkII & IDXYmP-ID3 MkII Series

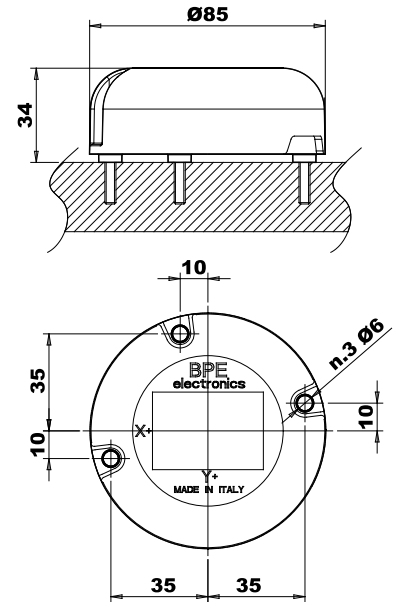
### Dimensions [mm]



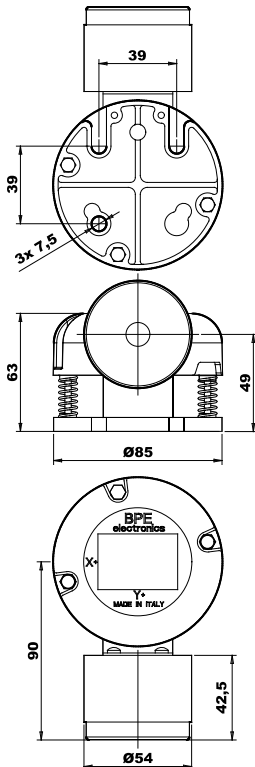
M: With flange and springs



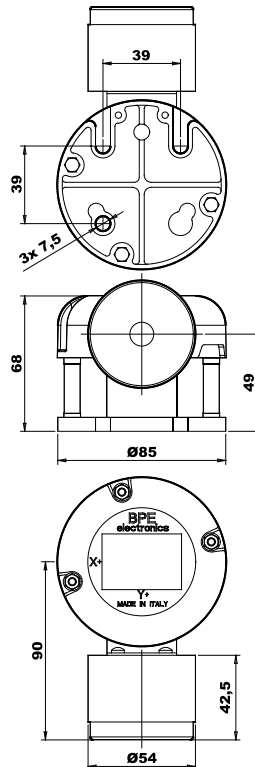
F: With flange and spacers



N: Without flange



M Z: With spring and buzzer



F Z: With spacers and buzzer