

# T O R Q U E – the revolutionary torque acquisition for

## Industry 4.0 and machine monitoring ("patented")

#### Advantages at a glance:

- ✓ Miniaturized dynamic torque measurement using strain gauge technology on a rotating shaft in stamp format
- ✓ compact TelMA Torque element with integrated sensor and telemetry interface
- ✓ simple assembly in series by means of micro-welding technology without affecting the shaft strength, without gluing, soldering or wiring
- ✓ integrated rotation speed measurement
- $\checkmark$  possible compensation of the bending moment influence by mounting 2 elements
- ✓ High accuracy and measurement signal resolution
- ✓ analogue or digital signal output
- ✓ digital, contactless signal transmission
- ✓ completely maintenance-free operation
- ✓ Diameter according to customer requirements 30mm 500mm

#### The system provides 3 measured variables:

- ✓ Torque
- ✓ Speed (optional)
- ✓ Temperature (only with digital output CAN or USB interface)



TelMA Torque Sensor for welding Dimensions: 35,53 mm x 18,1 mm x 6,25 mm



Standard thickness B: 3.2 mm

Inner diameter Di: variable

Outer diameter Da= Di+ 12 mm

(Diameter according to customer requirements)

### Output signals of the evaluation unit for further processing:

- ✓ CAN
- ✓ Voltage output: 2,5 V +/- 2,25 V
- ✓ Current output: : 4 20 mA



Industrial Version Ip67 Dimensions: 131,8 mm x 64 mm x 34 mm



OEM Version Ip40 Dimensions: 60,0 mm x 51 mm x 15,491 mm

### **Principle system structure:**



