

## Vibro-Meter Inductive expansion probe

### MAIN FEATURES

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- Expansion measurement
- 4-20mA two-wire loop powered output
- Suitable for 3 wire applications
- 50 mm und 100 mm Ranges available
- Scale to provide for easy adjustment and local readout
- Rugged industrial device
- Stainless steel sensing rod
- Spring-loaded sensing rod
- Frequency up to 5 Hz
- No additional electronics required



### Position scale

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Enclosure scale (see dimensional drawings)

Position is indicated on a transparent scale embedded in the sensor enclosure (no rod scale provided).

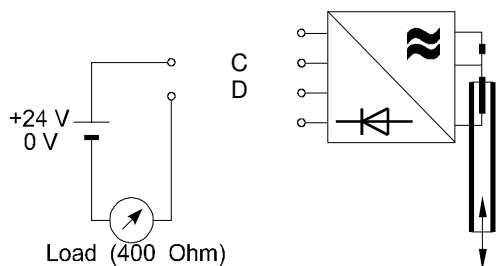


### Connection and operation (standard 2-wire configuration)

The sensor AE 119 provides a 2-wire loop powered electronics with 4...20mA signal output. Sensor supply is delivered by max. 3,5 mA loop current (at corresponding voltage level). Shielding is connected to common.

Loop voltage shall be  $U_s = 23...36$  VDC at 500 Ohm max. load. At 400 Ohm max. load a loop voltage of 21,5...36 VDC is acceptable, at < 20 Ohm load a loop voltage of 14...36 VDC

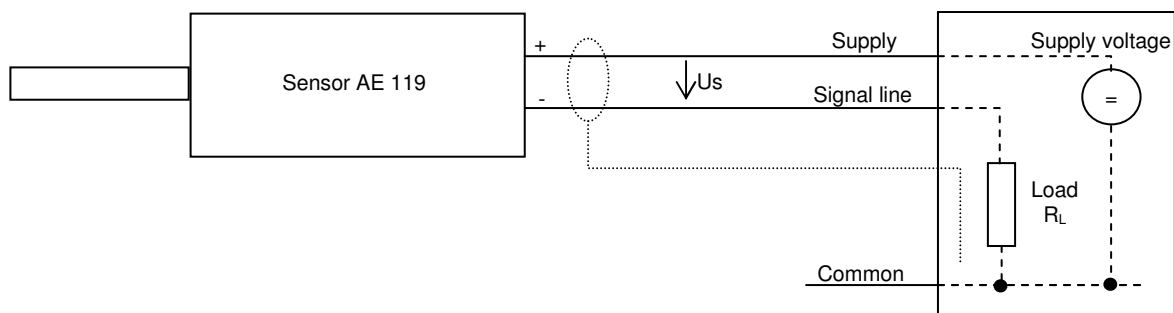
Connection: Wire Connector



Connector	Signal
C	Supply $U_s$ +
D	Supply common 0V

### Precautions for use in 3 wire configuration

In 3-wire configuration the "common" line remains unconnected. A sufficient supply level voltage  $V_s$  (depending on supply voltage and load) has to be provided. The sensor is 3-wire compatible, a sufficiently low load provided.

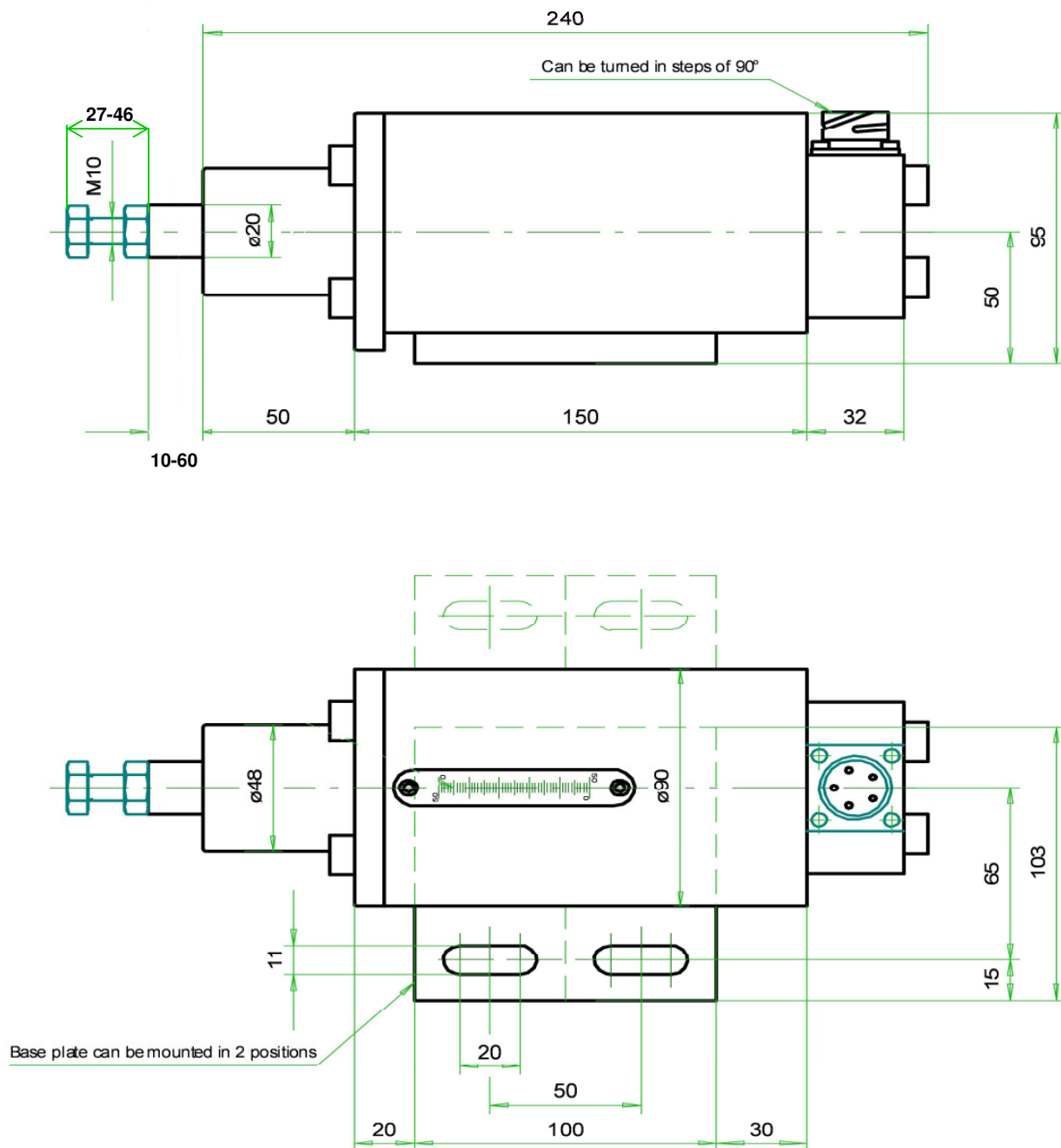


## SPECIFICATION

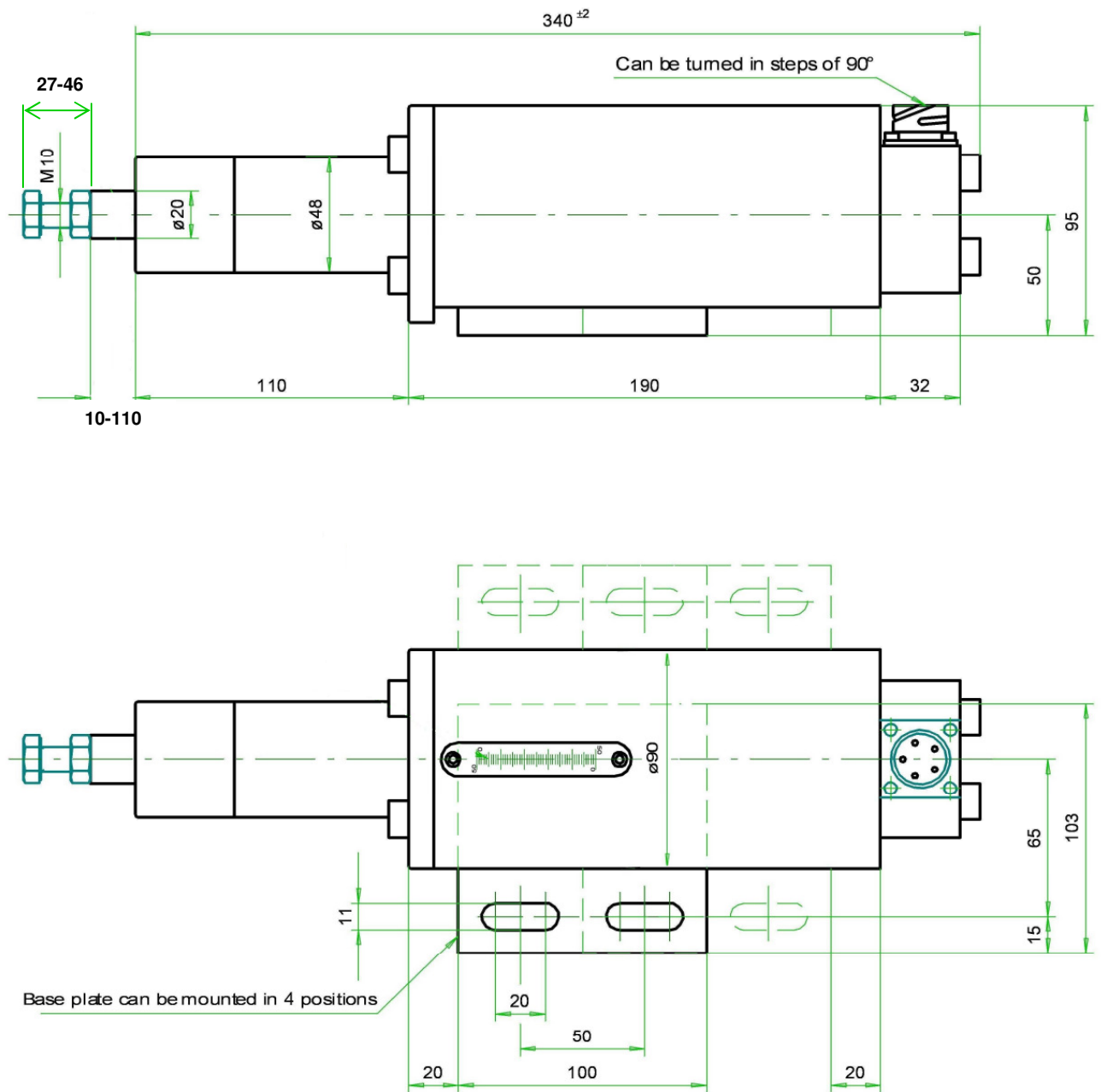
	AE119-50-SK-S	AE119-100-SK-S	Bemerkung
<b>Range</b>	50 (± 25) mm	100 (± 50) mm	Full-scale
<b>Mech. Travel</b>	52 mm	105 mm	Incl. Overtravel
<b>Linearity</b>	± 0,6 %		
<b>Electr. Dyn.</b>	0 ... 200 Hz		
<b>Mech. Dyn.</b>	0 ... 5 Hz		
<b>Spring force</b>	F <sub>0</sub> ~ 30 N F <sub>max</sub> ~ 50 N	F <sub>0</sub> ~ 30 N F <sub>max</sub> ~ 70 N	At end position At start position
<b>Material</b>	Enclosure: Rod: Probe tip:	Aluminium / Stainless steel Stainless steel, hardened Stainless steel, hardened	
<b>Weight</b>	approx. 3,7 kg	approx. 4,7 kg	
<b>Supply Us</b>	2-wire system, dep. on load		See "Connection"
<b>Load</b>	max. 500 Ohm		
<b>Protection Class</b>	IP 55		
<b>Output</b>	4 ... 20 mA		2-wire configuration
<b>Start position</b>	4 ± 0,15 mA		At inner scale end mark (rod fully retracted)
<b>End position</b>	20 ± 0,30 mA		At outer scale end mark (rod fully extracted)
<b>Operating temperature</b>	0 ... +70°C		

## MECHANICAL DIMENSIONS

### AE 119 – 50



## AE 119 – 100



## ORDERING CODE

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### VMD-AE119-X1-SK-S

Range (X1)	
50 mm	050
100 mm	100

SK: Enclosure scale (no rod scale provided)

S: Standard Temperature 0 to 70°C

Subject to change without notice.

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