

## Roller - Measuring System PRM

### Scope of Supply

'Ready to use' measuring modul with integrated force sensor, ball bearings, fixed and loose bearing arrangement, with 5 m cable (PVC) and standard connection T

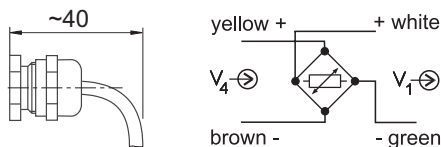
### Variants depends on the sensor

- N2: Plug connection straight, M12, moulded  
 N3: Plug connection right-angled, M8, moulded

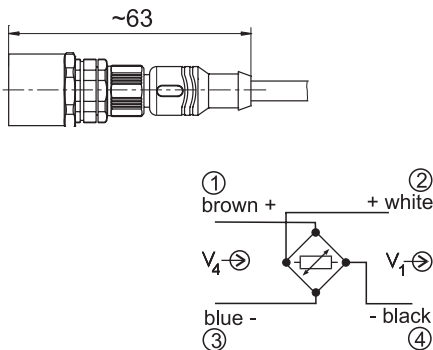


### Connections

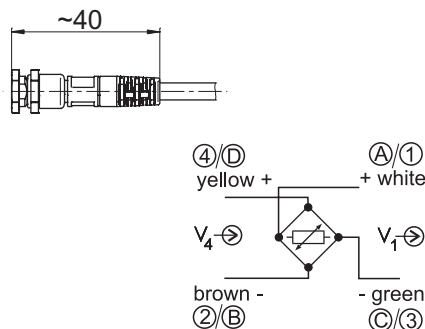
#### Variant T



#### Variant N2



#### Variante N3



$V_4$  Supply voltage  
 $V_1$  Signal voltage

### Special Features

- Nominal Forces from 200 to 2000 N
- Diameter, length and position of the roller freely selectable
- Easy installation, delivered ready for connection

The portable 3-roller measuring system is suitable for the web tension measurement in existing machines without major retrofitting.

With the given angle geometry and the ready-mounted rollers, the mobile measuring device only has to be inserted at the appropriate place in the machine. The measurement of the actually applied strip tension is possible without additional expense or modification. The 3 roller measuring system can also be used for stationary installation. The advantages of easy installation and commissioning are retained.

Possible is a two-sided roller bearing with two holding plates, also. Here, larger dimensions and force ranges can be realized on request.

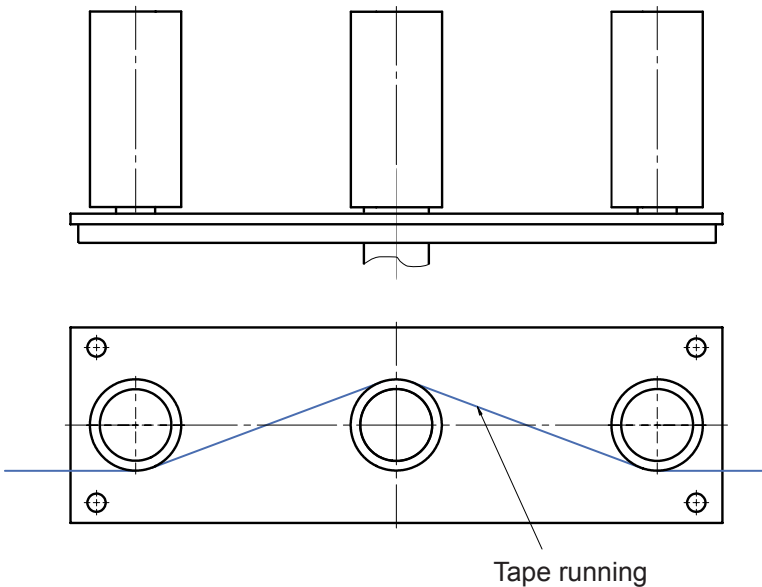
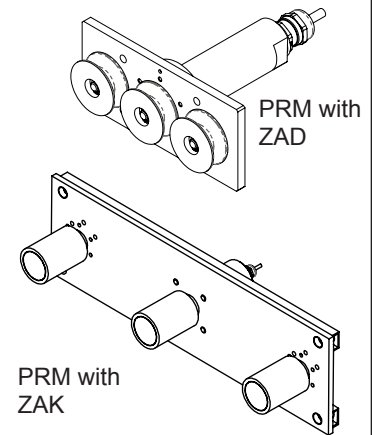
To capture the measurement values the portable amplifier PAD2 is suitable with

- Maximum value storage
- Overload display (also in the minus range)
- Tarable display

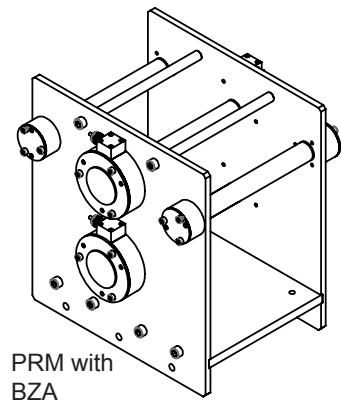


Versions on request	
Nominal force $F_{nom}$ (Measuring range)	200 N...2 kN
Operating force	Sensor dependent
Nominal rating	
Combined error	
Roller diameter	Customer specific
Roller length	
Roller position	
Dimensions of the der mounting plate	

Examples of measuring systems according to customer specifications



Example of a two-sided roller bearing with two mounting plates



Roller versions	Available versions
Material	Aluminum, steel, stainless steel, plastic
Surface coatings and treatments	Belt grinded, chrome, nickel, teflon, rubber, plasma-coated, hard-coated / anodised
Surface structure	Fluted, grooved, rhombic, etc.
Surface roughness	Rz 8-12 $\mu\text{m}$ or on customers request
Balance quality	Q 2,5; Q 6,3 ; (acc. to VDI 2060)