

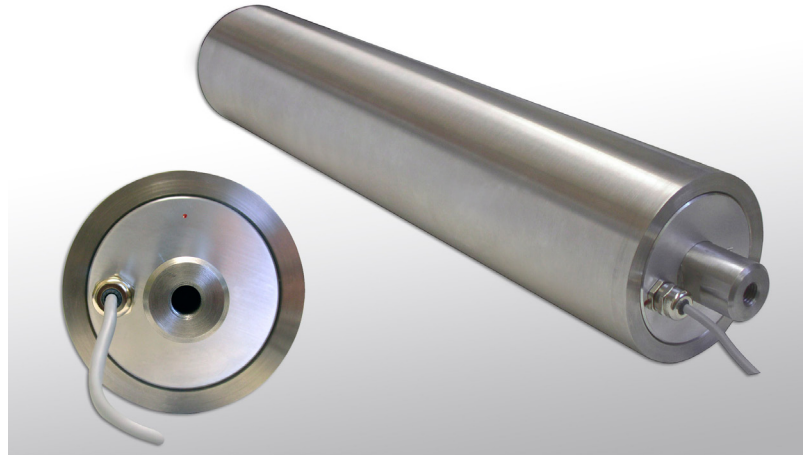
Measuring Roll MES

Scope of Supply

Measuring roll with 5 m cable (PVC),
and connection variant T:
cable gland, straight

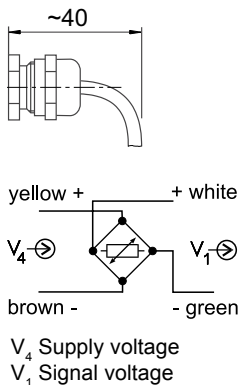
Additional Option

F: For use in explosive
areas, incl. J-Box



Connection

Variant T



Special Features

- Complete measuring roll with integrated measuring sensors
- Minimum of wiring, simple installation
- Nominal force range from 100 up to 800 N

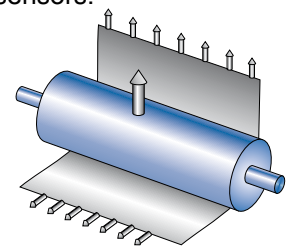
The measuring roll MES is designed for measuring web tension forces, e.g. in moving webs of paper, textile, plastics, metal without additional force sensors.

The compact design enables quick and cost effective integration into OEM machines or retrofitting into existing equipment.

The measuring roller MES has a continuous shaft, and can be supplied with either one or two web tension sensors. Mechanical stops provide overload protection of the sensors.

The ball bearings with a fixed and a floating bearing are maintenance-free. Tapped holes at both ends of the shaft offers optimal mounting to machine frames.

The shaft length is specified by the customer. The HAEHNE program offers optimal amplifiers to process the sensor signals and supply the analog and digital values for all common fieldbus variants.



Ordering Example

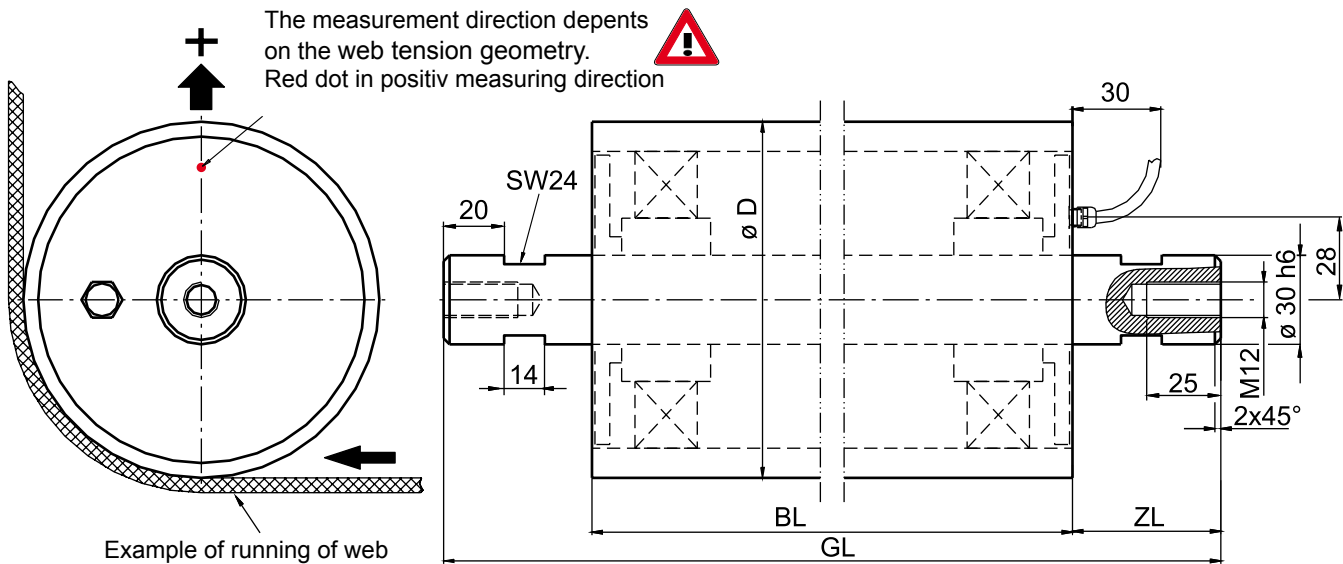
	ME2S 100-1000-1200-100-T			
Type (Standard with 2 sensors)				
Roll diameter (D)				
Roll length (BL)				
Overall length (GL)				
Nominal force				
Connection Variants / Options				

Variant with 1 sensor:

ME1S for single sided measurement

Technical Data		Values (%) based on nominal force	
Nominal force	100, 250, 500, 800 N	Bridge supply voltage	10 VDC
Max. operating force	160 %	Enclosure protection	IP50
Absolute max. force	300 %	Sensor cable (standard)	PVC, grey, 4 x 0,34 mm ²
Max. lateral force	100 %	Material of roll shaft	Steel
Nominal rating	1,5 mV/V	Material of roll shell	Aluminium, belt grounded, 8 µm
Combined error	1 %	Balance quality Q 2,5	n = 1000 min ⁻¹ (ø100) n = 800 min ⁻¹ (ø120) n = 600 min ⁻¹ (ø160)
Reproducibility	0,2 %	Deviation of cyclic running/ cylinder form	max. 35 µm
Nominal ambient temperature	+10...+60° C (+50...+140° F)	Other surface coatings on request	e. g. - hard coated, anodised - plasma coated - hard chromium plated
Operational temperature range	- 10...+70° C (+14... +158° F)		
Nominal resistance of the strain gauge bridge	ME1S: 350 Ω ME2S: 175 Ω		

Dimensions in mm (1 mm = 0.03937 inches)



Overall length (GL) : BL + (2 x ZL)
Shaft length (ZL) : 50 ... 300 mm

Size Selection		Roll length (BL) [m]																																																						
ø D [mm]	Nominal Force [N]	m																																																						
		0	0,1	0,2	0,3	0,4	0,5	0,6	0,7	0,8	0,9	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0																								
100	100	█																																																						
	250	█																																																						
	500	█																																																						
	800	█																																																						
120	120	█																																																						
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