

Tensile Force Measuring - Station Type: 3 R 50 A Type: 5 R - 50

Design: type 3 R 50 A



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The measuring stations **3 R 50 A** and **5 R 50** are destined to measure tensile forces on material having big diameter.

As well for material having big diameter as for material which is thin and stiff, it is necessary to have measuring heads, which are sufficient in proportion, to obtain a high measuring accuracy. Besides it is advantageously, that there is only a small deviation out of the straight-line.

Measuring - Station 5 R 50

To extend the measuring range - for thin material - downwards, the measuring-station **5 R - 50** is equipped with two additional guide rollers.

That enables a material guiding of 30 ° (angle of contact around the measuring-roller) and spreads the measuring range 10 - fold.

So it is possible, to measure a range of 0,5% - 100 % of the max. tensile forces reliable, without changing the measuring - station.

Function: the middle roller (measuring-roller) run on the Tensometric Radialforce - Sensor series: M 1300 - 20. Due to the deviation of the material which is measured, the resulting forces on the measuring roller are measured by the sensor. The radial force is proportional to the tensile force of the material which is measured.

Application: measuring tensile forces on: ropes, rubber or copper - cable, in the extrusion line and for similar application

Characteristics:

3 R 50 A:	for material diameter up to 50 mm, negligible deviation, only 4,7°
5 R 50 :	for material diameter up to 50 mm, negligible deviation, only 3° two different material guidings, by it an additional spreading of the under measuring ranges by the factor 10 and a material deviation of 30°

Measuring ranges:

3 R 50 A :	min. : 30 N up to 610 N	5 R 50 :	min. : 5 N up to 1000 N
	max.: 305 N up to 6100 N		max.: 40 N up to 8000 N

Roller material: aluminium alloy: AlCuMgPb; **Option:** - Ceramic coated roller groove
- Stainless steel rollers

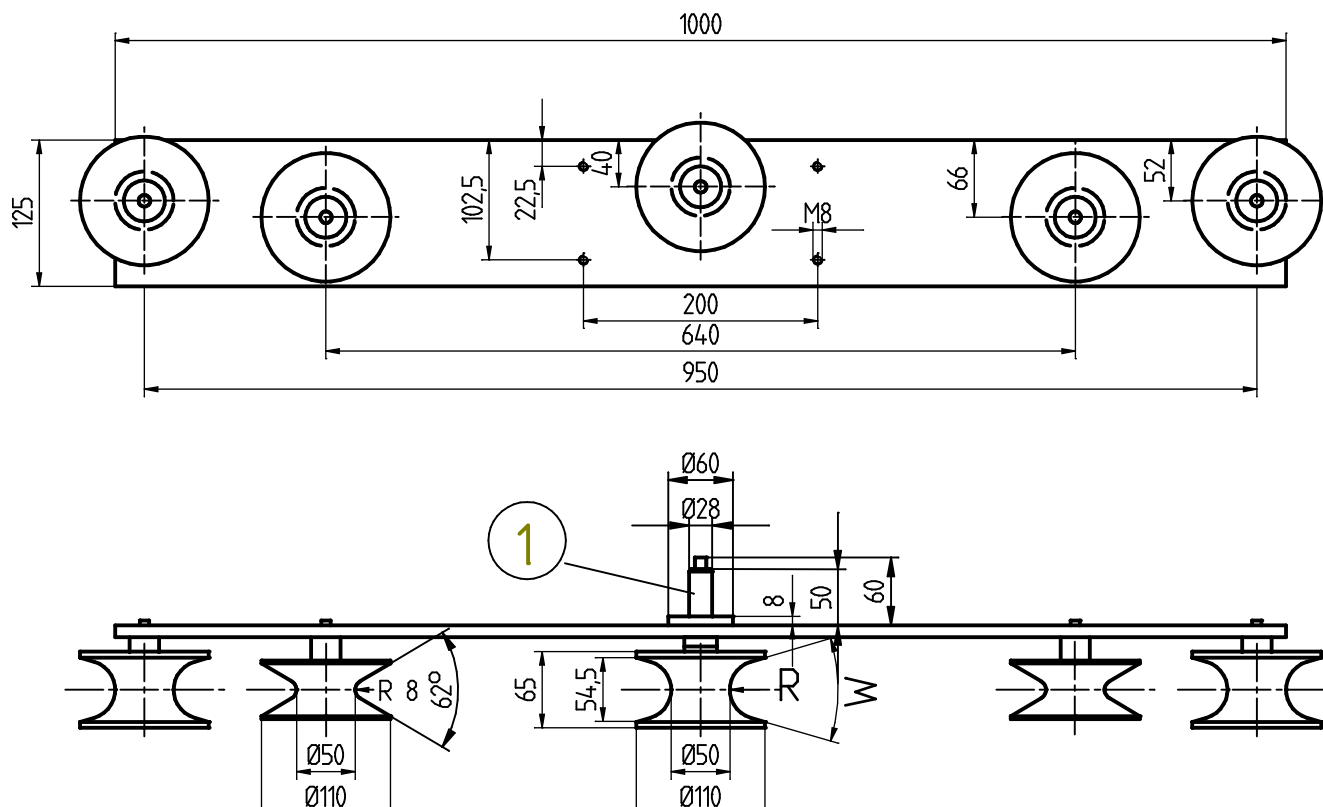
Mounting: the mounting- plate contains 4 holes M 8

Option: splash- proofed execution, protection: IP 64

Accessories: Tensometric tripod Z 150, with ground- fixing holes
Amplifier with indication: series SA 310 and series SA DMS 610

Technical data: Measuring - Station Type: 5 R 50

Dimensions :



- ① - Dimension measuring head type **M1100-20**;
 - Dimension measuring head type **M1300-20**;
 Ø28 replaced by Ø40; 8 replaced by 10; 50 replaced by 114; 60 replaced by 124;

Standard rollers:

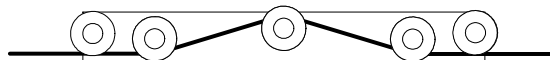
R (s. drawing)	6,5mm	8mm	12,5mm	18mm	25mm
W (s. drawing)	65°	62°	70°	25°	30°
Roller - type	50x110x50x6,5	50x110x50x8	50x110x65x12,5	50x110x46x18	50x110x65x25

Measuring - ranges:

Material guiding: A



Material guiding: B



Nominal load of the built-in measuring head	50N	100N	200N	300N	400N
(Guiding A) meas. range (N)	50 up to 1000	100 up to 2000	200 up to 4000	300 up to 6000	400 up to 8000
(Guiding B) meas. range (N)	5 up to 100	10 up to 200	20 up to 400	30 up to 600	40 up to 800