



The MAGPOWR TSR load cells are extremely accurate devices used to measure web tension in any unwind, rewind or intermediate web processing application.

The TSR line of load cells deliver precise web tension with low temperature drift due to a full Wheatstone bridge construction. The load cells allow measurement and high overload protection in both force directions. With a low profile design, space between the machine frames dedicated to the load cell is minimized.

The TSR can be flange mounted to any vertical machine surface. With an exchangeable ball bearing the maintenance is easy, the sensor itself does not have any wearing parts.

GENERAL SPECIFICATIONS

Gage Resistance 350Ω nominal	Repeatability 0.2% of full scale maximum
Excitation Voltage 10VDC max	Bearing Diameter 40 mm
Output Signal 1.5 mV/V at rated force, 15 mVDC max	Material Nickel plated steel
Operating Temperature 10°C to 60°C	Overload Stop Engagement 105% to 150% of full load rating
Combined non-linearity and hysteresis 0.5% of full scale maximum	Overload Protection 500% of full load rating
Temperature effect on zero 0.02% of rating per °C	Cable MAGPOWR signal cable LCC series, or mating connector part #12B220-1

KEY FEATURES

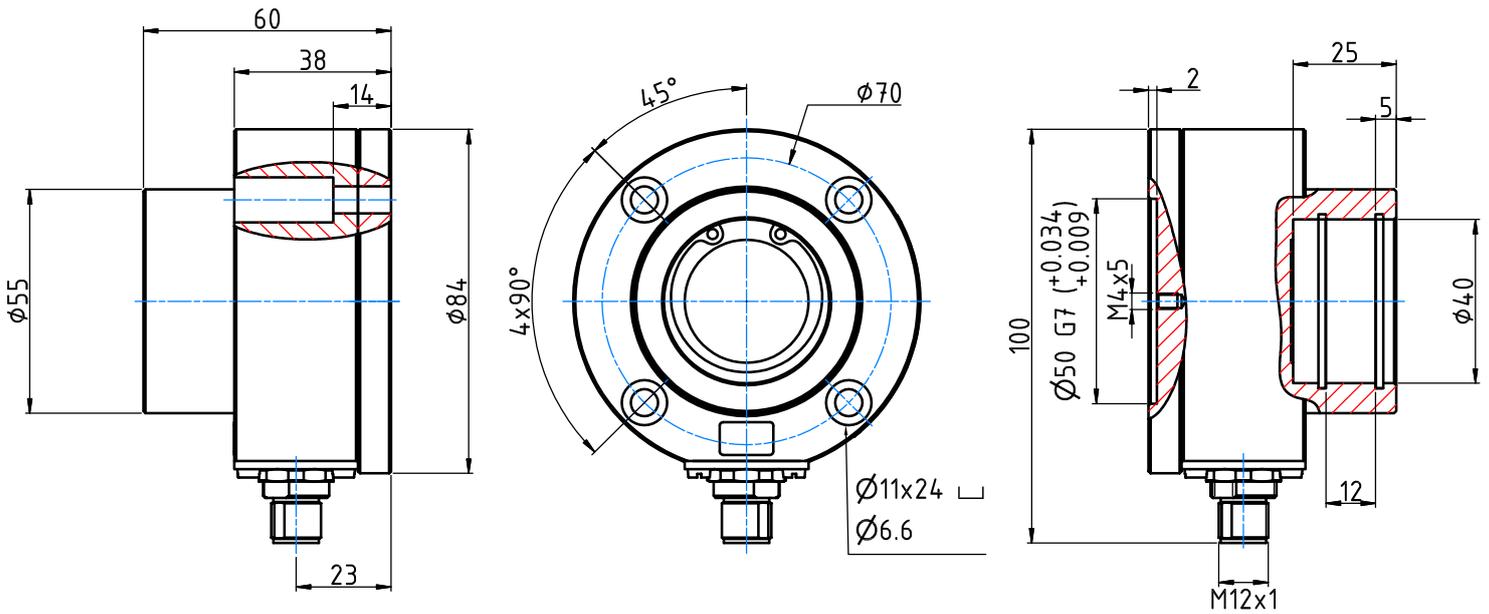
- Ruggedly constructed from steel for long life and dependability
- Three load ratings from 150N to 500N
- Full Wheatstone bridge design for measurement accuracy and low temperature drift
- Easy flange-mounting inside the machine frame with four hole pattern
- No wearing parts

MODEL NUMBER KEY

TSR	15	FB	—	EC12	M	/17
Type	Force rating [kg]	Flange, Bearing		Connector type [M12]	Unit type (Metric)	Inner bearing diameter [mm]

MAGPOWR TSR LOAD CELLS

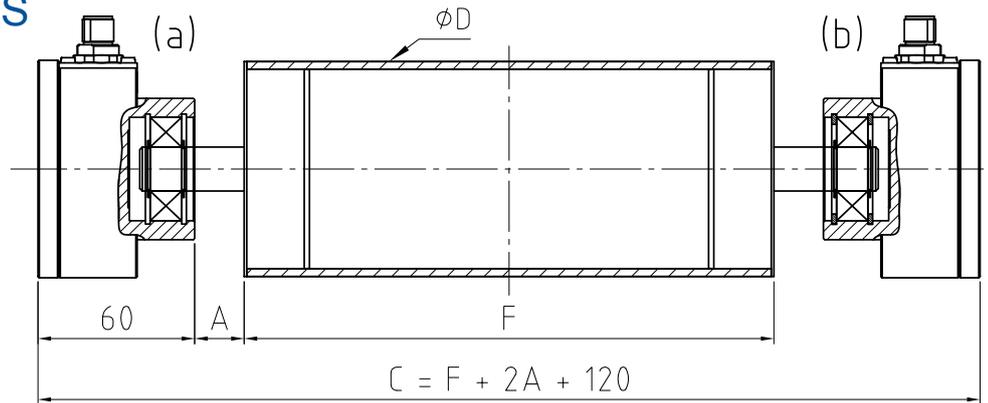
DIMENSIONS



MOUNTING DIMENSIONS

- (a) Floating bearing side
- (b) Fixed bearing side

Dimensions in mm



AVAILABLE MODELS

PART NUMBER	MODEL NUMBER	FORCE RATING [N]
M411861	TSR15FB-EC12M/17	150
M411629	TSR25FB-EC12M/17	250
M411939	TSR50FB-EC12M/17	500

OPTIONAL ACCESSORIES

- Self aligning bearings with 17 mm inner diameter (one per load cell, M284953)

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WEBEX

