

# Belt Tensioning Device RSM2000

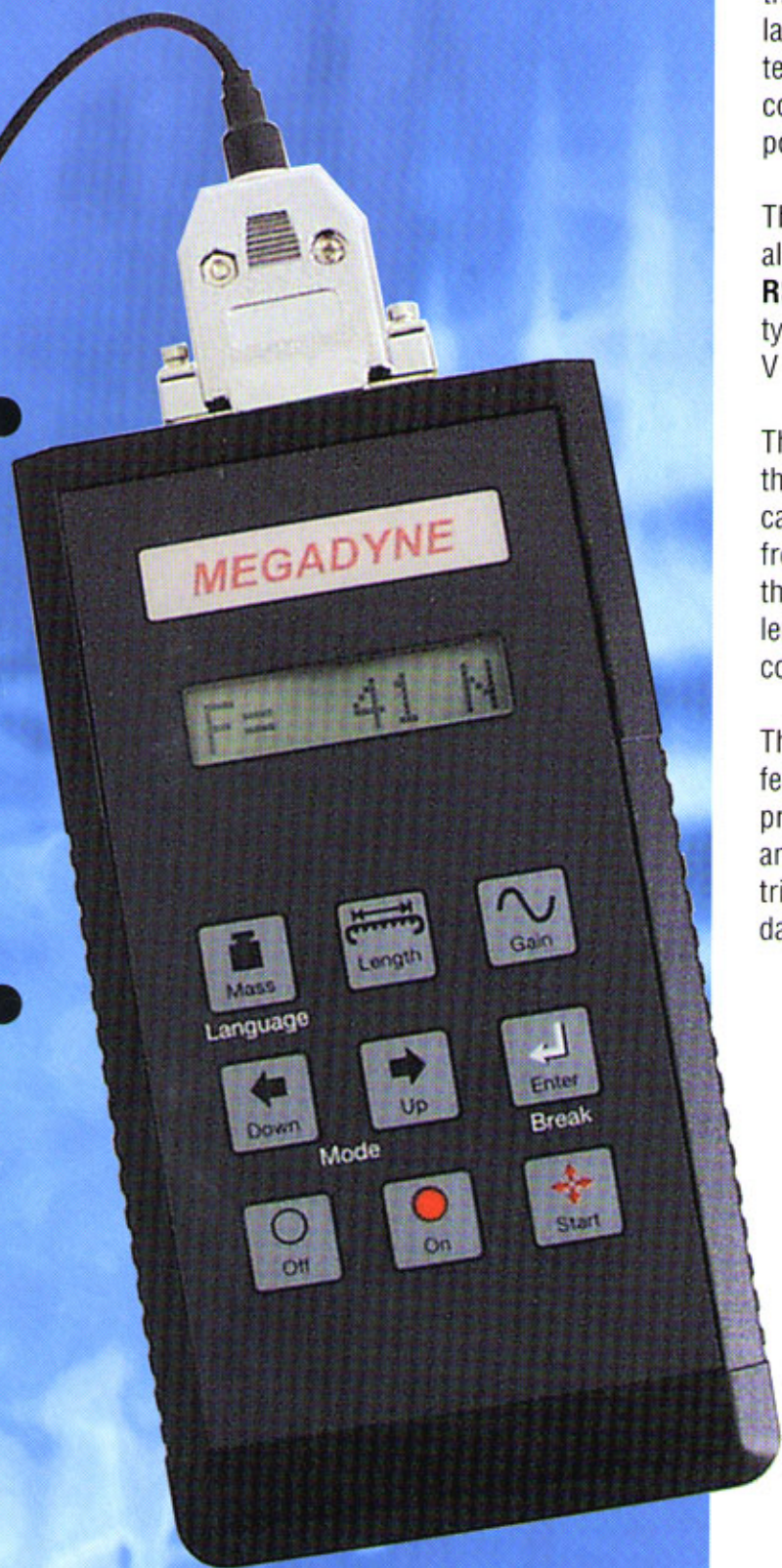


A major difficulty installing transmission belts is to achieve a correct belt tension. Lifetime of support bearings and transmission belts and therefore reliability of the complete system largely depend on an optimally adjusted belt tension. In case of linear actuators, only a correctly adjusted belt tension provides the best possible positional accuracy.

The belt tension measuring device **RSM2000** allows to measure the actual belt tension. The **RSM2000** is applicable with all industrially used types of transmission belts, such as: flat belts, V belts, toothed belts, poly-V belts etc.

The microcontroller based **RSM2000** measures through a highly sensitive sensor vibrations and calculates by numerical filtering the eigen-frequency of tensioned belts. In addition - given the specific mass of a belt and its free vibrating length - the **RSM2000** provides directly the corresponding belt tension in Newton.

The **RSM2000** comes with several comfort features, such as language switch, user programmable standard values for specific mass and belt length and an in sensor body integrated trigger button. Optionally a **RS232** interface for data output of last 50 measurements is available.



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## Technical Data:

Housing Material	ABS
Housing Dimensions	157 mm x 85 mm x 30 mm (LxWxH)
Mass	approx. 240 g
Display	LCD, 8 characters, character size 7 mm
Powersupply	9 V battery [recommended capacity 550 mAh]
Measuring Range	free belt length: 1 ... 9999 mm specific mass: 1 ... 999 g/m eigen-frequency: 15 ... 400 Hz belt tension: 1 ... 9999 N
Resolution	0,1 Hz / 1 N
Sensor	applicable with all belt types/belt materials
Sensor Dimensions	32 mm x 32 mm x 16 mm (LxWxH); not including holder bar and switch
Measuring Error	$E_f < 3\%$ relative to actual value
Temperature Range - operational	+10 ... +50°C
Temperature Range - storage only	-5 ... +70°C
Protection Class	IP54

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