ZLM – AUTOMATIC RACK MEASURING MACHINE

ZLM type 1000 – 2000

Measuring racks up to a cross-section 100 x 100 mm
Product description

The Principle:
The ZLM automatically measures racks. For this purpose, up to two racks are placed on the magnetic plate and initially measured the torsion and deflection by confocal position sensor. Subsequently, the rack is stretched over two magnetic fields first laterally of the attachment bar and then down. Finally, the rack teeth are measured with a confocal position sensor.

The basic machine:
The basic machine consists of a stable welding construction. The measurement runs automatically after entering the rack parameters.

Advantages:

Highly rigid construction
The rigid construction guarantees a long lifespan combined with highest precision and maximum availability.

Latest linear drive technology, generously dimensioned high-precision linear rail guides and scales of lengths allow increasing accuracy. Measuring distances can be superimposed by three confocal position measuring sensors, thus enabling additional speed.

Easy-to-use
A well thought-out operating concept enables ergonomic handling and short training times.

Time saving
A rack can be completely measured in less than three minutes.
DETAILS AND FITTINGS

Operation / programming

After initial programming of any cross section or profile, it can be saved as a program and loaded again at any time. After selecting the program, the machine automatically sets itself to the desired parameters. The conversion to a new cross-section or a new profile thus takes place within a few seconds.

TECHNICAL DATA

Machine

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rack width</td>
<td>10 - 100 mm</td>
</tr>
<tr>
<td>Rack height</td>
<td>10 - 100 mm</td>
</tr>
<tr>
<td>Max. module for single test drive</td>
<td>8</td>
</tr>
<tr>
<td>Travel speed rapid traverse</td>
<td>10 m/min</td>
</tr>
<tr>
<td>NC control</td>
<td>Siemens 840SL</td>
</tr>
<tr>
<td>Drives</td>
<td>Siemens</td>
</tr>
<tr>
<td>Total connected load</td>
<td>8 kW / pre-fuse: 32 A</td>
</tr>
<tr>
<td>Weight</td>
<td>ca. 3000 kg (ZLM 1000)</td>
</tr>
<tr>
<td></td>
<td>ca. 4000 kg (ZLM 2000)</td>
</tr>
</tbody>
</table>
HABRAMA ZSM compact - SERIES
Rack Grinding Machine
ZSM compact Type 2200 - 3200
For grindings racks up to module 22

HABRAMA ZEM - SERIES
Rack Deburring Machine
ZEM Type 1000 - 2000
For deburring of rack teeth up to a cross-section 100 x 100 mm

HABRAMA PPSM - SERIES
High Precision Profile Grinding Machine
PPSM Type 2200 - 10200
For grinding racks up to module 22, broaches, saw blades and special profiles

HABRAMA ZLM - SERIES
Automatic Rack Measuring Machine
ZLM Type 1000 – 2000
For measuring racks up to a cross-section 100 x 100 mm

HABRAMA KPSM - SERIES
Contour Precision Grinding Machine
KPSM Type 2200 - 4200
For longitudinal profile grinding up to 70 x 70 mm

HABRAMA FSM - SERIES
Flat Grinding Machine
FSM Type 2200 - 4200
For flat grinding up to 600 mm width

HABRAMA ZFM compact - SERIES
Rack Milling Machine
ZFM compact Type 2200 - 3200
For milling racks up to modul 36

HABRAMA UVF - SERIES
Universal Gear Milling Center
UVF-Center II - III
For gear cutting of gear wheels, worms, worm wheels, spline shafts, trapezoidal thread spindles and timing belt pulleys

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