

**Technical Data Tape Machine M 002 P**  
Updated August 2020

<b>Tape transport</b>	<p>Processor-controlled and directly driven 3-motor drive with 1/4" tape width Reel motors: 2 brushless DC pancake motors with rotor angle controlled sinusoidal commutation</p> <p>Electric brakes controlled by tape tension control Capstan motor: 1 brushless DC pancake motor with rotor angle controlled sinusoidal commutation</p> <p>2 stepper motors for mechanical brake and tape head assembly</p> <p>Pinch roller driven by servo drive</p>
<b>Operating position</b>	All angles between horizontal and vertical
<b>Tape path</b>	1 Ball bearing to the left of the tape head assembly, one flutter roller, 2 tape guides, 1 playback head + 2 head substitutes. Damping element with deflection pulley left and right with ball bearings above the head assembly
<b>Tape speed</b>	19 cm/s and 38 cm/s Tolerance of speed: < 0,04 %
<b>Wow &amp; Flutter</b>	< 0,35 % at 38 cm/s < 0,06 % at 19 cm/s
<b>Tape slip</b>	< 0,08 % at every reel size
<b>Reel size</b>	Up to a maximum of 30 cm reels, fastening via screw clamps
<b>Spooling time</b>	1 speed 8,2 m/s
<b>Tape transport electronic</b>	<p>Processor-controlled, 2 sensors for tape tension, speed sensor on right roller</p> <p>Remote control with infrared remote control optional Real-time counter via high-resolution incremental encoder in time format hrs / min / sec, 100 / sec</p>
<b>Tape heads</b>	<p>2 channels, 1 playback head with 2.00 mm or 2.75 mm track width Core material: permalloy 2.00 mm track linear head: Inductance @ 1 KHz 270 mH DC resistance 65 Ohm Gap size: 2 µM 2.75 mm track butterfly head: Inductance @ 1 KHz 200 mH DC resistance 160 Ohm Gap size: 4 µM</p>
<b>Outputs</b>	<p>Direct head out via balanced 3 pole XLR with processor controlled signal mute Control output for speed and equalization CIR/ NAB via 4-pole XLR for operation with playback amplifier WS13</p>

**Power supply**

Separate aluminium housing with output via 5-pole XLR  
Cable length: 1 meter (maximal length)

Connection via IEC connector 3-pole  
Protection class 1  
240 V / 50 Hz

100 W maximum power consumption without +/- 18 V audio supply  
110 W maximum power consumption with +/- 18 V audio supply

**Dimensions**

460 mm x 380 mm x 107 mm (W x D x H)

**Weight**

11,5 KG (Tape machine) + 1,1 Kg (Power supply)