

  
**BALLFINGER**

**Technical Data Tape Recorder M 063 H1**  
Updated december 2018

<b>Tape transport</b>	<p>Processor-controlled 3-motor drive with 1/4 "or 1/2" tape width (1/2" in preparation)</p> <p>Standard spooling motors: Double belt drive with PU round belts and ironless swiss made precision servo motors. Electric brakes controlled by tape tension sensors</p> <p>Winding motors optional: 2 brushless DC pancake motors with rotor-angle controlled sinusoidal commutation. Electric brakes controlled by tape tension sensors</p> <p>Capstan motor standard: Belt drive with brushless DC motor with block commutation</p> <p>Capstan motor optional: direct drive with brushless DC pancake motor with rotor-angle controlled sinusoidal commutation</p> <p>3 stepper motors for mechanical brake and head assembly</p> <p>Pinch roller driven by servomotor</p> <p>Hour meter</p>
<b>Operating position</b>	All angles between horizontal and vertical
<b>Tape path</b>	Ball bearings to the left and right of the tape head assembly, one tape stabilizing roller left and right each, damping element with deflection pulley left and right outside
<b>Tape speed</b>	<p>2-speed standard: 4.75 cm / s + 9.5 cm / s, or 9.5 cm / s + 19 cm / s or 19 cm / s + 38 cm / s</p> <p>Optional direct drive and 3 speeds: 9.5 cm / s + 19 cm / s + 38 cm / s or 19 cm / s + 38 cm / s + 76 cm / s</p> <p>Tolerance of target speed: &lt;0.04%</p>
<b>Wow &amp; Flutter</b>	From 0,025% to 0,09 % depend of speed and capstan motor configuration
<b>Tape slip</b>	< 0,08 % at every reel size
<b>Reel size</b>	Up to a maximum of 27 cm reels standard reel motors or 30 cm with optional direct drive reel motors, fastening via screw clamps
<b>Spooling time</b>	<p>2 speeds adjustable: 5 m/s, 10 m/s</p> <p>Low speed for archiving with increased tension with 2,5 m/s</p> <p>Optional: Low speed for archive rewind with increased tension at 2.5 m / s</p>
<b>Tape transport electronic</b>	<p>Processor-controlled, high-resolution sensors for tape tension, deflection roller with high-resolution incremental encoder for speed and totalizer</p> <p>Optional real-time counter in time format Std / Min / Sec, 100 / sec, with autolocator function</p>
<b>Audio electronic</b>	None, playback head and signal output through-wired with short-circuiting via relay contacts, processor-controlled

<b>Tape heads</b>	Standard: 1/4 "with 2.00 mm track width Option 1: 1/4 "with 2.75mm track width (in preparation) Option 2: 1/2 "with 5.35mm track width (in preparation)
<b>Equalizing</b>	N/A
<b>Frequency response (Measured with RTM SM 900)</b>	N/A
<b>VU-Meter</b>	N/A
<b>Total harmonic distortion (measured with RTM SM 900)</b>	N/A
<b>Signal to Noise Ratio (measured with RTM SM 900)</b>	N/A
<b>Crosstalk</b>	N/A
<b>Erase ratio</b>	N/A
<b>Inputs</b>	N/A
<b>Outputs</b>	Balanced via XLR
<b>Power supply</b>	Connection via IEC connector 3-pole Protection class 1 230 V / 50 Hz Europe 120 V / 60 Hz USA 70 W maximum power consumption
<b>Dimensions</b>	480 mm x 460 mm x 250 mm (W x H x D)  Ready for installation in 19 " rack
<b>Weight (without side panels)</b>	Between 16.5 kg and 20.6 kg (belt drive or direct drive)