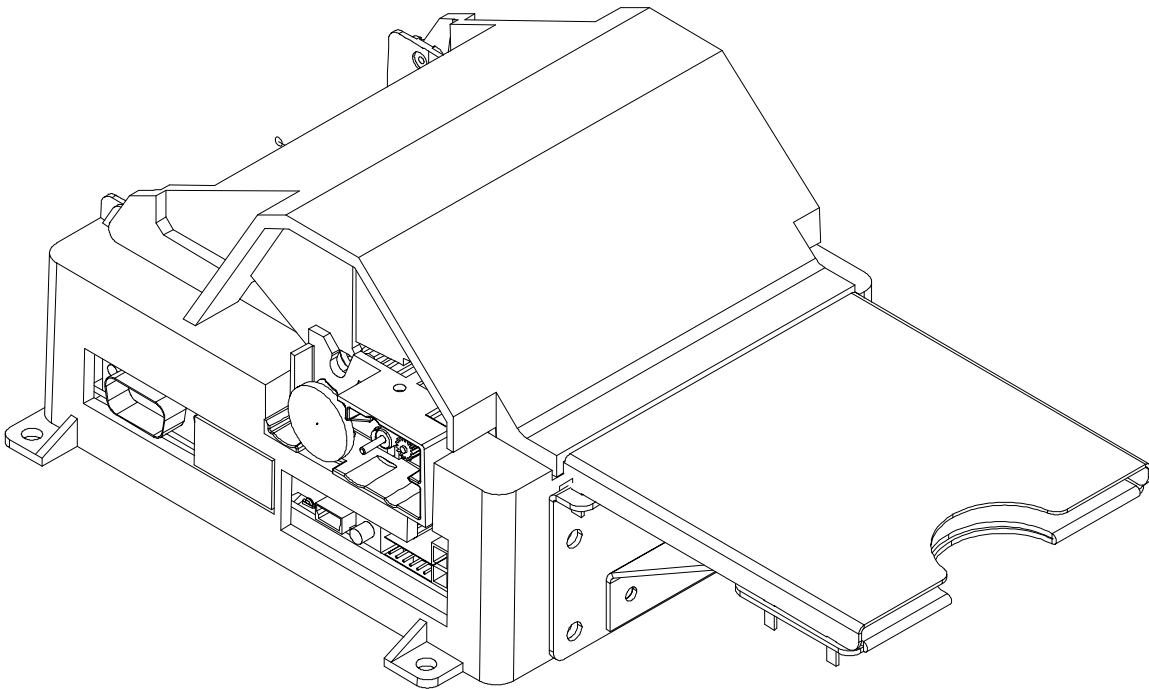




NANOPTIX EZ-TEAR THERMAL PRINTERS Ticket Chute Design Guide



First Edition: Sept 2004
Last Revision: Sept, 2004

Document #102725

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1. Nanoptix Solutions

1.1 Available Ticket Chutes

Nanoptix has already developed several ticket chutes for the EZ-Tear printers that are available for purchase. Please contact the Nanoptix sales team with your application. We might already have a ticket chute that meets your needs.

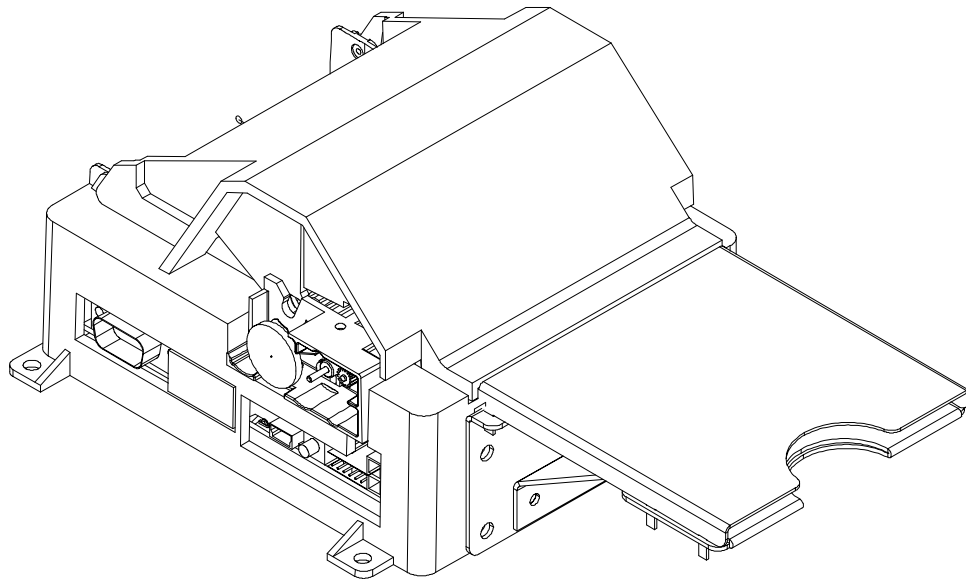


Figure 1: Nanoptix EZ-Tear-80 Printer with optional ticket chute

1.2 Custom Ticket Chutes

Nanoptix has the resources to develop custom ticket chutes to meet our customer's needs. Please contact the Nanoptix sales team with your application. Nanoptix will be happy to work with you to provide a custom solution that will suite your needs.

2. Customer Solutions

Some of our customers have the engineering resources to develop their own ticket chute solutions. If this is your situation, please follow the guidelines below to ensure that you are fully compatible with your Nanoptix EZ-Tear printer.

2.1 Ticket Chute Width

The Nanoptix EZ-Tear printers are available in two paper widths. The table below indicates the minimum recommended widths for the inside of the ticket chute.

Ticket Width	Min. Internal Width
80 mm \pm .2 mm (3.15 in. \pm .008 in.)	82 mm min. (3.23 in.)
65 mm \pm .2 mm (2.55 in. \pm .008 in.)	67 mm min. (2.64 in.)

Table 1: Minimum Internal Widths

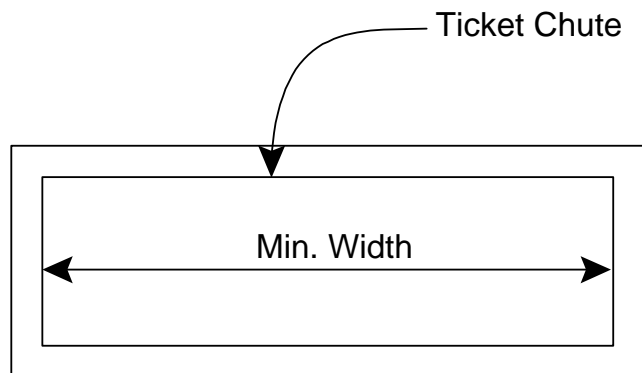


Figure 2: Front View / Minimum Width

2.2 Ticket Chute Height

The internal height of the ticket chute should be a 3mm +/- 0.5mm (0.118"/+/-0.019").

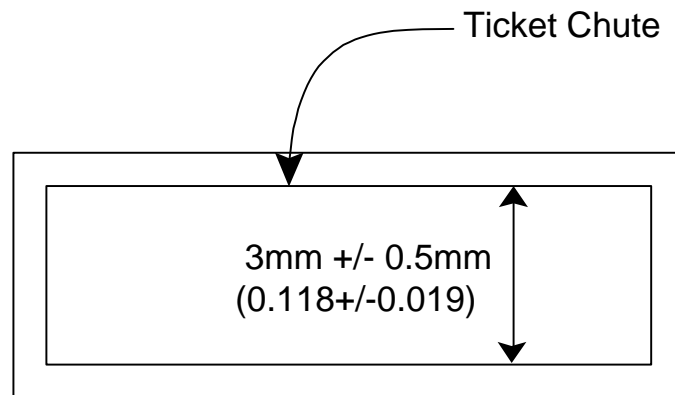


Figure 3: Front View / Recommended Height

2.3 Minimum Straight Path

The path of the ticket leaving the front of the printer should be straight for a minimum distance of 30mm (1.18") before curving.

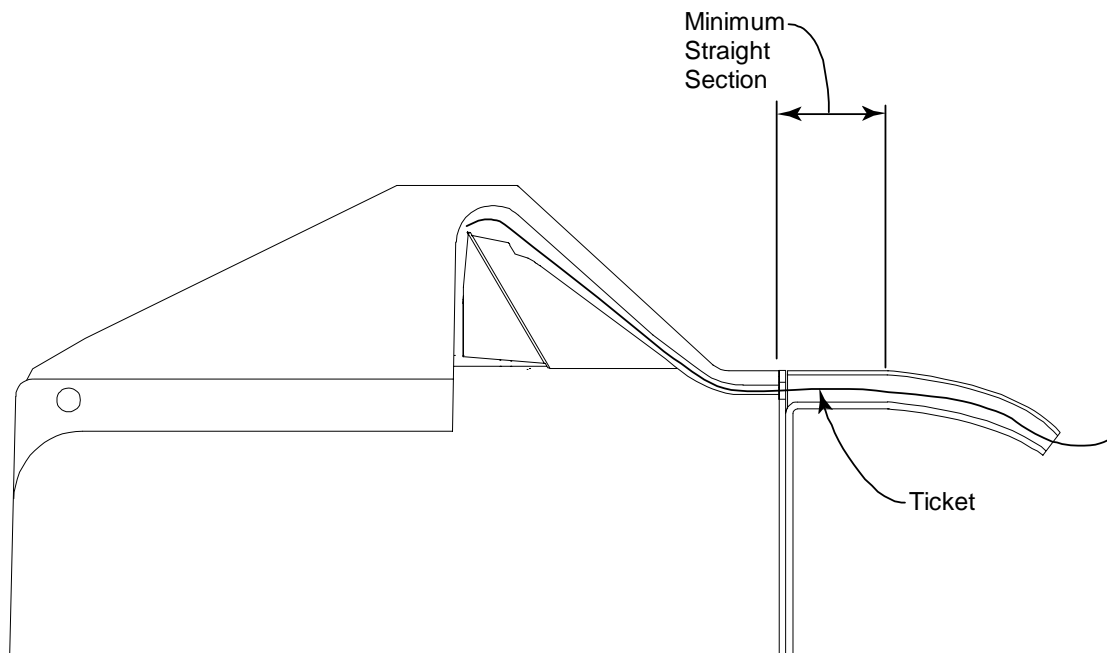


Figure 4: Side View / Minimum Straight

2.4 Buffered Ticket

There is 63.5mm (2.5") of ticket length that is buffered in the EZ-Tear printer. It is recommended to use a minimum of 15mm (0.59") of ticket length as a finger hold.

To calculate the proper ticket length, use the following formula:

$$\text{Chute length} = \text{Required Ticket Length} - 63.5\text{mm} - 15\text{mm}$$

Or

$$\text{Chute length} = \text{Required Ticket Length} - 2.5'' - .59''$$

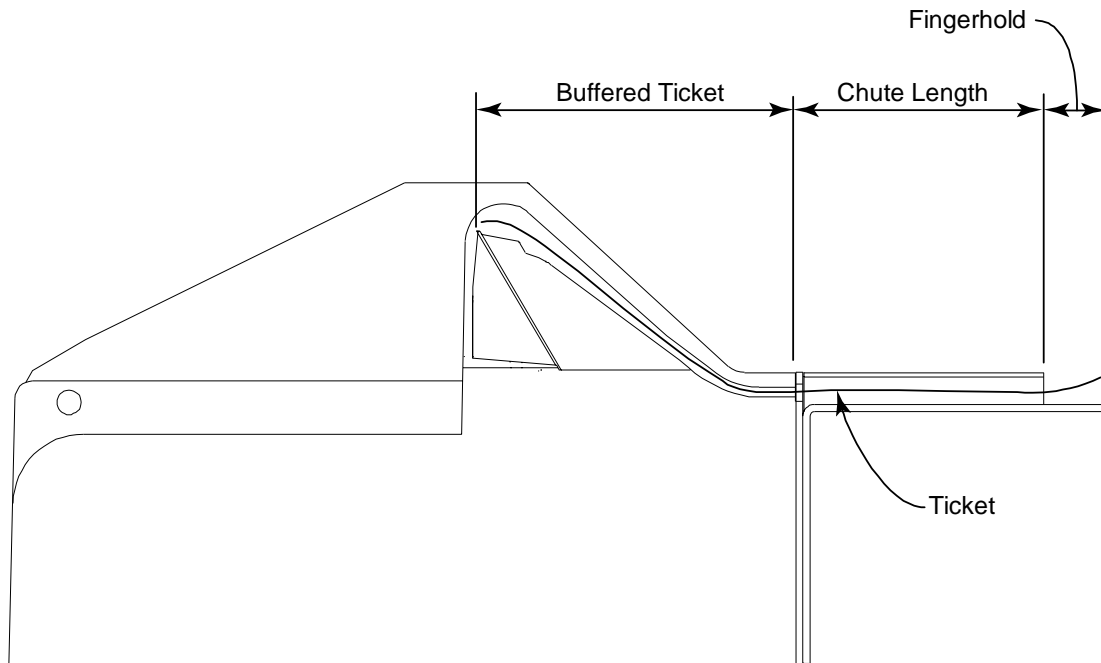


Figure 5: Side View / Buffered Ticket

2.5 Pinch Points

All pinch points or sharp edges must be eliminated from the ticket chute design to prevent snagging the ticket and creating paper jams. This is especially important if you are designing the paper chute with sheet metal that can have sharp edges or burrs.

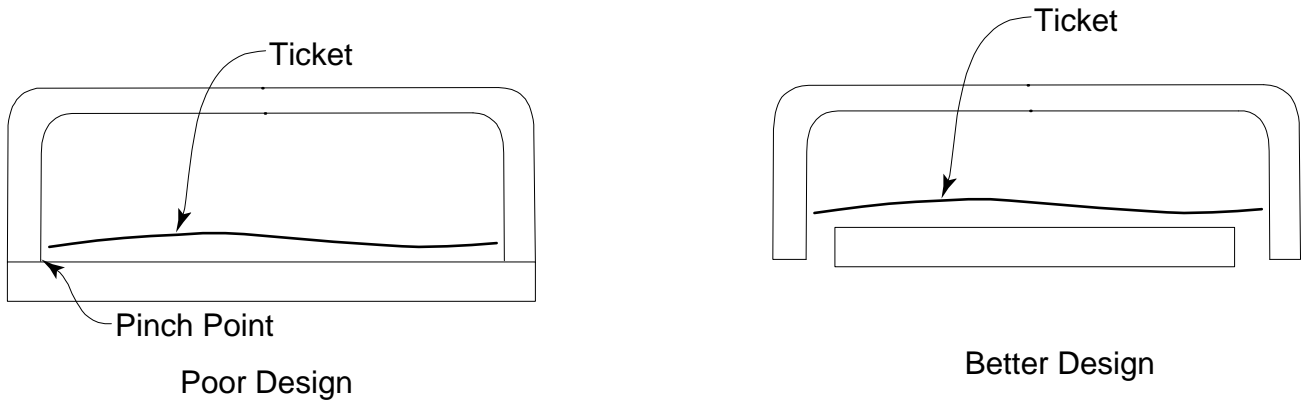


Figure 6: Front View / Pinch Points

2.6 Paper Curl

All ticket chute designs must consider the fact that the paper has an upward curl when leaving the EZTear printer. The ticket will tend to rub against the top surface of the ticket chute. The top surface of the ticket chute needs to be especially free from any features where the ticket could catch or snag.

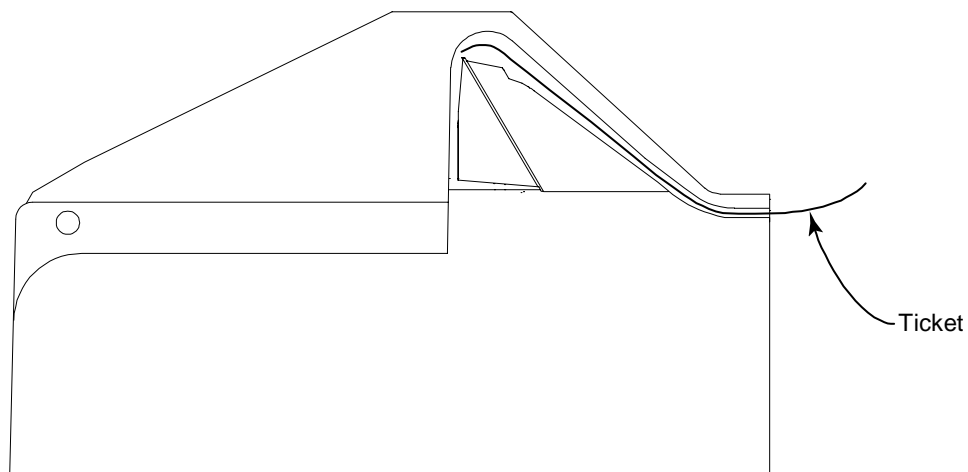


Figure 7: Side View / Paper Curl

APPENDIX A: Mechanical Drawings

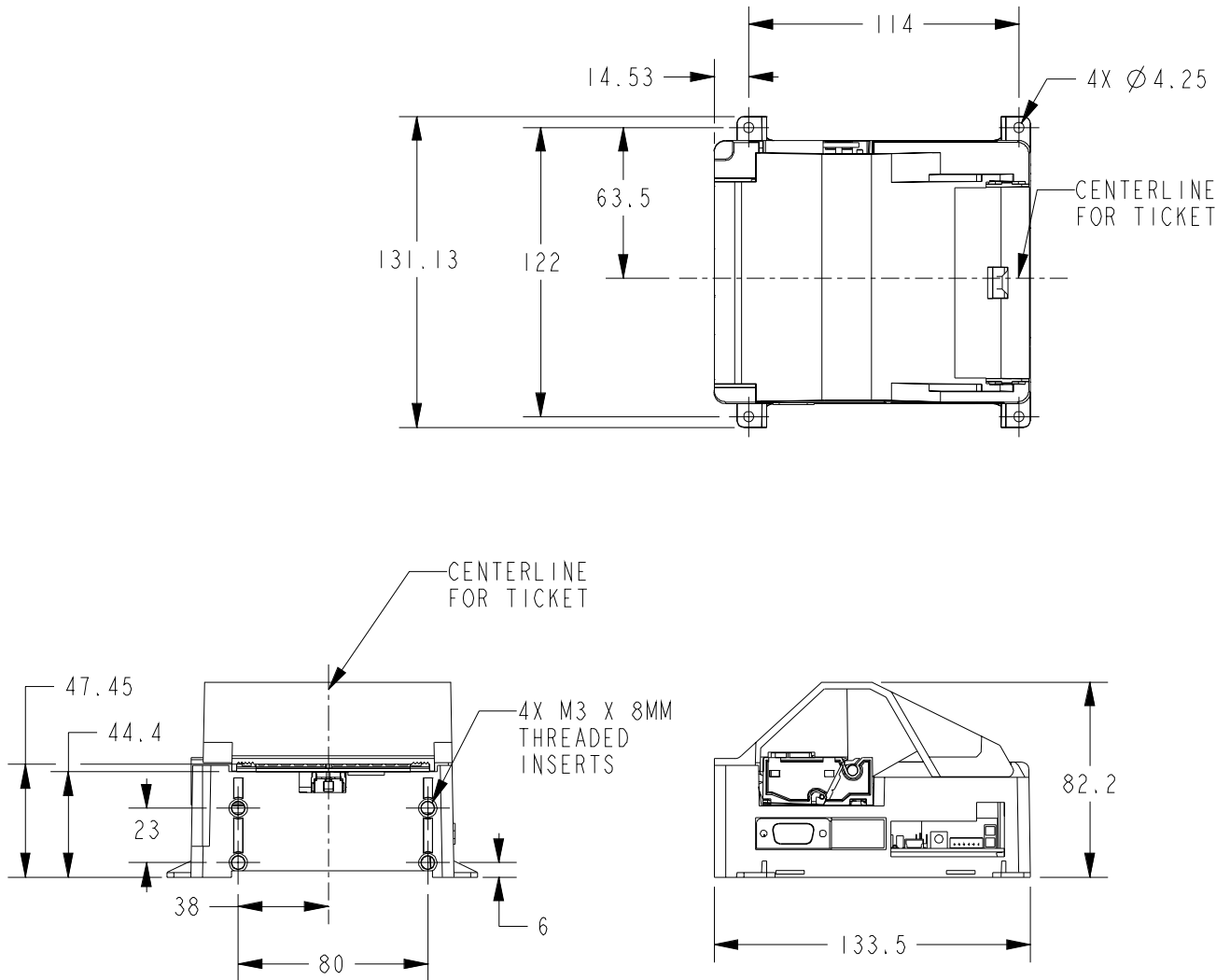


Figure 8: Mechanical Dimensions
(All dimensions in MM, tolerance +/-0.25mm)

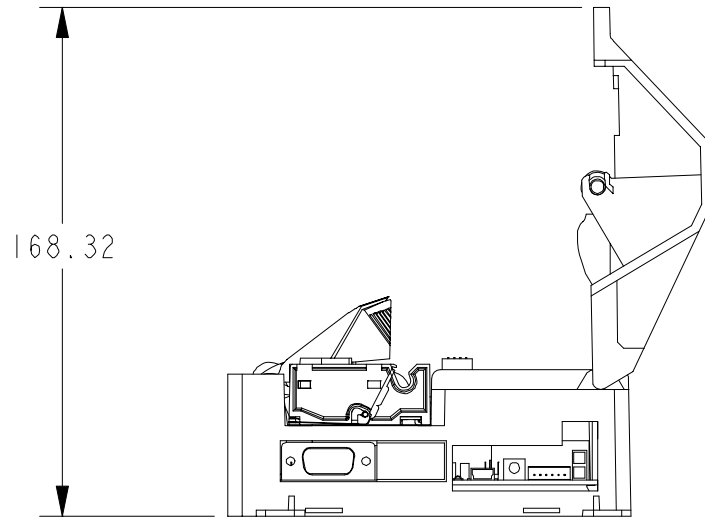


Figure 9: Mechanical Dimensions (Clearance for Cover)
(All dimensions in MMs, tolerance +/-0.25mm)