# am.co.za TruCUT Laser Tube Datasheet

## Standard Series Sealed CO<sub>2</sub> Glass Laser Tube

| SKU         | RP  | MP | LEN  | DIA | TV | WV | IC | MC | SL & | ос | BD  | DA   | M2    | С |
|-------------|-----|----|------|-----|----|----|----|----|------|----|-----|------|-------|---|
| LC-TUBE/30  | 30  |    |      |     |    |    |    |    |      |    |     |      |       |   |
| LC-TUBE/40  | 40  |    | 700  | 50  |    |    |    |    |      |    |     |      |       |   |
| LC-TUBE/60  | 60  |    | 1200 | 55  | 24 | 16 |    |    |      |    | 4.5 | 1.62 | 1.065 |   |
| LC-TUBE/80  | 80  |    | 1250 | 80  | 28 | 23 | 28 | 28 | 5000 | 25 | 5.5 | 1.6  | 1.060 | • |
| LC-TUBE/100 | 100 |    | 1450 | 80  | 30 | 26 | 30 | 28 | 5000 | 26 | 5.5 | 1.55 | 1.050 | • |
| LC-TUBE/130 | 130 |    | 1650 | 80  | 40 | 28 | 30 | 28 | 5000 | 28 | 5.5 | 1.5  | 1.040 | • |
| LC-TUBE/150 | 150 |    | 1850 | 80  | 40 | 28 | 32 | 30 | 5000 | 28 | 6   | 1.5  | 1.040 | • |
| LC-TUBE/180 | 180 |    | 2050 | 80  | 40 | 28 | 32 | 30 | 5000 | 28 | 6   | 1.5  | 1.040 | • |

### Premium Series Sealed CO<sub>2</sub> Glass Laser Tube

| SKU          | RP  | MP  | LEN  | DIA | TV | WV | IC | MC | SL & OC | BD | DA | M2 | С |
|--------------|-----|-----|------|-----|----|----|----|----|---------|----|----|----|---|
| LC-TUBE/P80  | 80  | 90  | 1050 | 80  |    |    |    |    | 10000   |    |    |    | • |
| LC-TUBE/P90  | 90  | 100 | 1250 | 80  |    |    |    |    | 10000   |    |    |    | • |
| LC-TUBE/P100 | 100 | 130 | 1450 | 80  |    |    |    |    | 10000   |    |    |    | • |
| LC-TUBE/P130 | 130 | 160 | 1650 | 80  |    |    |    |    | 10000   |    |    |    | • |
| LC-TUBE/P150 | 150 | 180 | 1850 | 90  |    |    |    |    | 10000   |    |    |    | • |

#### **Terms**

| • | SKU     | The Code of AM.CO.ZA Products, call 072 222 2211 / 060 600 6000 for Prices                            |
|---|---------|---|
| • | RP      | Rated Power in Watt reached at Operating Current (OC) with 5% tolerance                               |
| • | MP      | Maximum Power in Watt reached at Maximum Current (MC) with 10% tolerance                              |
| • | LEN     | Tube Length in mm, with ±20mm tolerance   |
| • | DIA     | Diameter of the Tube in mm, with ±2mm tolerance   |
| • | TV      | Trigger Voltage in Kilovolts  |
| • | WV      | Working Voltage in Kilovolts  |
| • | IC      | Input Current in mA   |
| • | MC      | Maximum Operating Current in mA, on same Wattage Power Supply   |
| • | SL & OC | Designed Service Life in Continues Hours and Correspondent Operating Current in mA,                   |
|   |         | with Efficient Water Cooling and Working Temperature not Higher than 25°C                             |
| • | BD      | Diameter on Laser Beam in mm, with ±0.5mm tolerance   |
| • | DA      | Divergence Angle of Bean in milliradians (mrad)   |
| • | M2      | Beam Quality Factor or M <sup>2</sup> , the Degree of Variation of a Beam from an Ideal Gaussian beam |
| • | С       | Indicate whether the Discharge Tube has been Galvanized with Catalyst Coating                         |

#### **Laser Tube Warranty**

We provide 3 month warranty for Standard Series and 6 month warranty for Premium Series.

A process of examining of- and feedback to- the laser tube manufacture is required for us to decide the laser tube condition is to be processed in line with the warranty. Preconditions exist for laser Tube warranty, please carefully read and understand those conditions which listed at <a href="http://am.co.za/laser/tube/warranty">http://am.co.za/laser/tube/warranty</a>

# **am.co.za** TruCUT Laser Tube Installation Suggestions

| Tube Wattage | Power Supply              | Maximum<br>Current | Minimal Cooling                                 | Suggested Cooling   |  |  |  |
|--------------|---------------------------|--------------------|---|---|--|--|--|
| 2014/        | LC-POWER/40               | 13 mA              |   | AG-WATER  |  |  |  |
| 30W          | LC-POWER/60               | 12 mA              |   |   |  |  |  |
|              | LC-POWER/40               | 15 mA              |   |   |  |  |  |
| 40W          | LC-POWER/60               | 12 mA              | AG-WATER  |   |  |  |  |
|              | LC-POWER/90               | 12 mA              | Generic Submersible Water                       |   |  |  |  |
|              | LC-POWER/60               | 20 mA              | Pump. Water bucket required.                    |   |  |  |  |
| 60W          | LC-POWER/90               | 18 mA              |   | A-COOLER  |  |  |  |
|              | LC-POWER/100 16 mA        |                    | NO-RUST/15, NO-RUST Additive Liquid for Cooling | AM-3000 Thermolysis Water-Cooled Chiller  |  |  |  |
|              | LC-POWER/90               | 22 mA              | and Protection 1.5kg Bottle Suggested.          | NO-RUST/15 Suggested.  Change water at least once every three month.                |  |  |  |
| 80W          | LC-POWER/100              | 20 mA              | Change water at least once                      |   |  |  |  |
|              | LC-POWER/150              | 16 mA              | a month.  |   |  |  |  |
|              | LC-POWER/90               | 23 mA              |   |   |  |  |  |
| 90W          | LC-POWER/100              | 21 mA              |   |   |  |  |  |
|              | LC-POWER/150              | 17 mA              |   | A-CHILLER/800  AM-5000 800W Water Chiller with Air Compressor NO-RUST/15 Suggested. |  |  |  |
|              | LC-POWER/100              | 24 mA              |   |   |  |  |  |
| 100W         | LC-POWER/150              | 20 mA              | A-COOLER  |   |  |  |  |
|              | LC-POWER/180              | 16 mA              |   | Change water at least once every three month.                                       |  |  |  |
| 10011        | LC-POWER/150              | 26 mA              |   |   |  |  |  |
| 120W         | LC-POWER/180              | 22 mA              | A OUIL LED/000                                  |   |  |  |  |
| 12014        | LC-POWER/150              | 28 mA              | A-CHILLER/800                                   |   |  |  |  |
| 130W         | LC-POWER/180 25 mA        |                    |   | A-CHILLER/1400  |  |  |  |
| 150W         | LC-POWER/150              | 30 mA              |   | AM-5200 1400W Water   |  |  |  |
|              | LC-POWER/180 28 mA        |                    |   | Chiller with Air Compressor Only use <b>NO-RUST/15</b> as                           |  |  |  |
| 160W         | LC-POWER/150 30 mA        |                    | A CUILLED // 400                                | cooling media suggested.  Change cooling media at least once every three            |  |  |  |
|              | <b>LC-POWER/180</b> 28 mA |                    | A-CHILLER/1400                                  |   |  |  |  |
| 10014        | LC-POWER/150 32 mA        |                    |   | month.  |  |  |  |
| 180W         | LC-POWER/180              | 30 mA              |   |   |  |  |  |

Bolded text of laser power supply is the default Power Supply if you purchase laser machine from us.

Maximum allowed current is to ensure longer lifespan of the laser tube, its required setup for laser tube warranty. For Laser Power Supply from us, LC-POWER/90 and upwards have the ability to adjust output current. Besides control current by Power Supply, you can also lower the percentage of output to lower the current.