

## 200 ml Glass Syringe - Laboratory

with metal luer lock



| Tomopal Part #                      | 130-4200                      |
|-------------------------------------|-------------------------------|
| <b>Piston Outside Diameter:</b>     | 42.90 mm $\pm$ 0.25 mm        |
| <b>D1) Barrel Diameter Outside:</b> | 47.65 mm $\pm$ 0.35 mm        |
| <b>D2) Barrel Collar Diameter:</b>  | 61.0 mm $\pm$ 0.75 mm         |
| <b>D3) Piston Collar Diameter:</b>  | 54.5 mm $\pm$ 0.75 mm         |
| <b>L) Length:</b>                   | 276.00 mm $\pm$ 0.75 mm       |
| <b>Increment:</b>                   | 10.0 ml                       |
| <b>Volume:</b>                      | 200.0 ml $\pm$ 1.5% of volume |

### Features:

- The syringe is made from heat resistant borosilicate glass.
- The material and construction is resistant to breakage from shock and sudden temperature changes.
- It is annealed and tested until free of internal strain, to withstand repeated washing with hot water.
- Reinforced at luer lock tip and barrel base, the points at which most breakage occur.
- Plunger is individually ground and fitted to barrel for smooth movement with no back flow.
- Barrel rim is flat on both sides to prevent rolling and is wide enough for convenient finger tip grip.
- The syringes are available in custom fit design. The custom fit syringes are uniquely numbered for matching piston and barrel.
- The metal luer lock tip meets the specification of American National Standards for Medical Materials luer taper fitting performance, HIMA MD 70.1 - 1983.
- The metal luer lock fitting is made from nickel-plated brass and fits all female luer lock fittings.
- The syringe is clearly marked with graduations of 5.0 ml and 10.0 ml. The graduations are permanently fused for lifetime legibility.

### Glass Properties:

|                               |                                           |                             |                           |
|-------------------------------|-------------------------------------------|-----------------------------|---------------------------|
| <b>Expansion coefficient:</b> | 52 $\pm$ 10 <sup>-7</sup> / Centigrade    | <b>Softening point:</b>     | 760 @ degrees centigrade  |
| <b>Density:</b>               | 2.33g $\pm$ 0.03g CM <sup>3</sup>         | <b>Melting temperature:</b> | 1250 @ degrees centigrade |
| <b>Modulus of elasticity:</b> | 64 $\pm$ 10 <sup>3</sup> mm <sup>-2</sup> | <b>Strain point:</b>        | 500 @ degrees centigrade  |
| <b>Water resistance:</b>      | First Class                               | <b>Annealing point:</b>     | 545 @ degrees centigrade  |
| <b>Acid resistance:</b>       | First Class                               | <b>Hardness:</b>            | 7                         |
| <b>Alkali resistance:</b>     | First Class                               | <b>Color:</b>               | Clear                     |