

Syringe Catalog

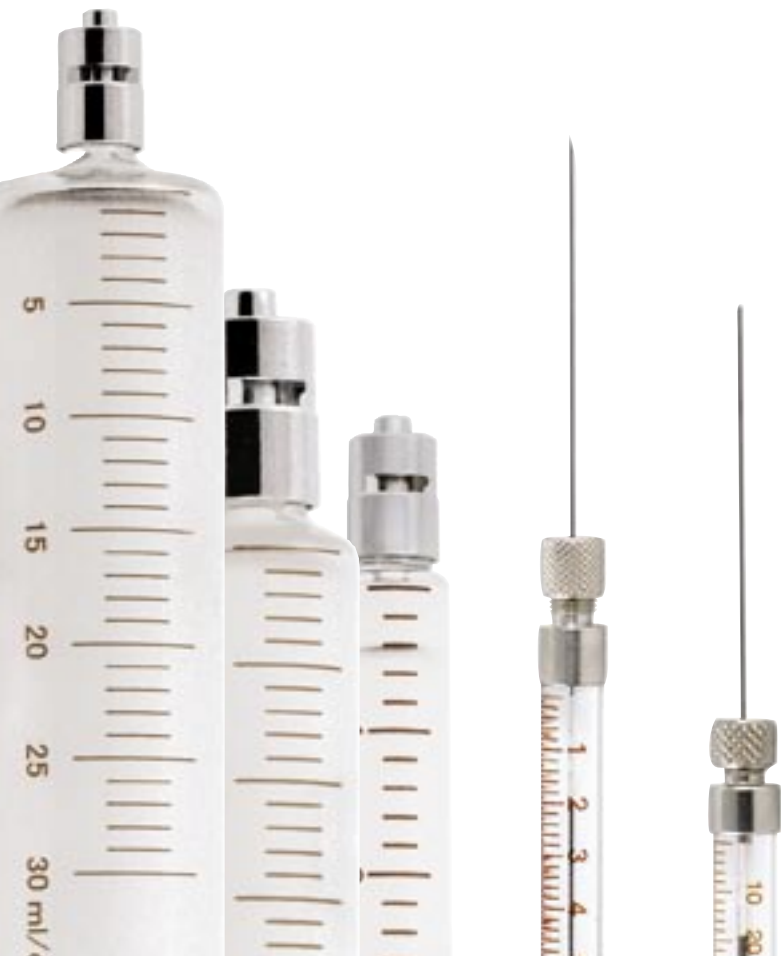
Fluid Sampling Pumps

Glass Syringes

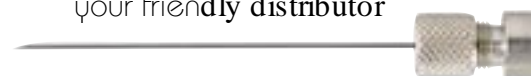
Control Syringes

Carrying Cases

Valves and Plug Caps



tomopal[®]
your friendly distributor



Shipping Information

Payments: Net 30 (subject to credit approval)

Price: US Dollars

FOB: Sacramento, CA, USA

Delivery: For 50ml/cc syringe, 5 working days

All Other Items: from 7 working days to 4 weeks, depending on shipping method, shipping address and availability of items.

Order and Contact Information

Fax: (916) 429-2701

E-mail: sales@tomopal.com

Web: www.tomopal.com

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Terms and Conditions

Terms

Tomopal, Inc. accepts checks, wire transfers, Visa, MasterCard or American Express credit cards, and open account invoicing. To determine the total of your order, use the pricing in our catalog or on our website. Invoices are dated and mailed the same day the orders are shipped and marked due in 30 days. Open Account invoices must be paid within 30 days of the invoice issue date to maintain open accounts in good standing. Open account must be approved prior to placing an order.

Prices

All prices are FOB Sacramento, California, USA, and are subject to change without notice. Standard shipping for domestic orders are via UPS (3 Day Select Air) or FedEx (FedEx Express Saver Air) unless otherwise requested at the time of order. Shipping charges will be added to all UPS and FedEx orders. You may also provide your UPS, Federal Express, or DHL account number at the time of order for freight collect shipments.

Export Orders

Export orders may be charged to Visa, MasterCard or American Express credit cards or paid by International Money Order or wire transfer in US Dollars. Export orders are subject to processing charges due to additional transaction costs such as wire transfer banking fees. Export orders must be placed via fax (916) 429-2701, mail, or e-mailed to sales@tomopal.com.

Standard shipping methods for export orders are UPS International, Federal Express, and DHL. For UPS, Federal Express, and DHL shipments, please provide an account number and Tax ID (EIN or GST) for freight, duty and VAT billing.

Drop-Shipments

Tomopal, Inc. will assist you with urgent requests by drop-shipping directly to your customer's address for a minimum charge of \$10.00 per order. However, Tomopal, Inc. does not assume any responsibility in collection of your customer's payment, possible exchanges, or any phone communications, etc. All such requests or details must be made by you. Orders for drop-shipments must include the proper shipping information, phone numbers, and e-mail for UPS or FedEx delivery staff.

Terms and Conditions

Placing an Order

The best way to place orders or to request an open account:

Fax: (916) 429-2701
E-mail: sales@tomopal.com
Phone: (916) 429-7240

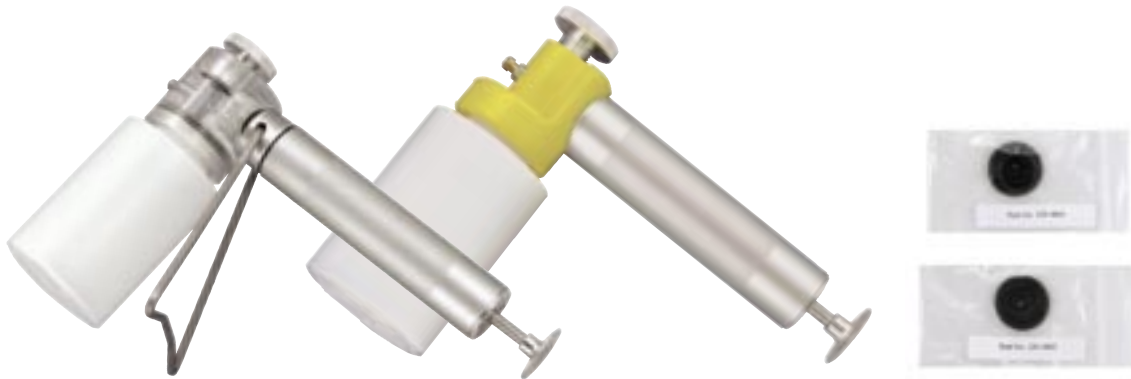
Orders must be placed using a Tomopal, Inc. part number. Customer reference numbers may be included on the invoice and packing slip if requested when the order is placed. Usually orders are shipped within 48 hours. Express delivery orders are shipped with the next available pick up by the requested carrier.

Warranties

We warrant products distributed by Tomopal, Inc. to be free of defects in material and workmanship. If our products do not meet this criteria, we will replace or repair the defective products as long as they are returned to Tomopal, Inc. within 45 days of the invoice date. No warranty of merchantability or of fitness or any other warranty is expressed or implied. Tomopal, Inc. is not liable for consequential or other damages, or for any expense incurred through the use of our products. Tomopal, Inc. products are not intended for human implantation or use in aircraft applications. The products are intended for use in industrial, environmental, and analytical testing laboratories only.

Return Policy

Tomopal, Inc. has a No Return Policy, and does not accept responsibility for customer errors. If, however, we have shipped you products that do not meet the terms of our warranty, or if we made an error in filling your order, or if the product arrives in damaged condition, please contact us within 10 days to discuss corrective action. To maintain traceability and product quality, products that leave our facility are never restocked or resold.



Sampling Pumps

The fluid sampling pump is designed to draw a vacuum of 27 inches of Hg (Mercury). The patented tube coupling device accepts any size sampling tube (with an outside diameter of 3/16" through 5/16") without changing the fittings. **The sampling tube is inserted through the coupling device until the lower end extends below the top of the sample bottle.** When the knurled knob is turned to tighten the seal, the vacuum will draw fluid directly into the bottle without coming in contact with the pump. **The patented feature allows multiple samples to be taken without cleaning the pump between samples.**

Sampling Containers

Any bottle that has thread size of 38 mm will fit the pump. Usually the plastic bottles in sizes of 2, 4, 8, 16, and 32 ounces are available in the market from many manufacturers.

Application

This pump can be used for many applications; here are some proven applications: oil sampling, environmental related fluids, chemicals, water, hazardous fluids that are not easily accessible otherwise.

Part Number	Description
120-3897	Pump with Stand
120-3898	Pump without Stand
120-3801	Repair Kit for 120-3897
120-3082	Repair Kit for 120-3898



Glass Syringes

All of our Glass Syringes and Control Syringes are made in Japan to extremely high standards, with such high precision that barrels and plungers are not interchangeable. Because of the high degree of control we exercise over the

Syringe Properties:

- 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.
- The cylinder-plunger fit is leak proof and meets the requirements of Federal Specification GG-S-921b.
- 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 available in universal fit or custom fit design. The custom fit syringes are uniquely numbered for matching.
- 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 fitting is made from chrome-plated brass and fits all female luer lock fitting.
- The syringe is clearly marked with graduations of 1 and 5 ml. The graduations are permanently fused for lifetime legibility.

Glass Properties:

Expansion coefficient:	52 +/- 10 ⁻⁷ / Centigrade	Softening point:	785 @degrees centigrade
Density:	2.36g +/- 0.03g CM ³	Melting temperature:	1260 @degrees centigrade
Modulus of elasticity:	64 +/- 10 ³ mm ⁻²	Strain point:	525 @degrees centigrade
Water resistance:	First Class	Annealing point:	570 @degrees centigrade
Acid resistance:	First Class	Hardness:	7
Alkali resistance:	First Class	Color:	Clear



Glass Syringes

Glass Syringes for Industrial and Laboratory uses only. Custom fit - Made in Japan

Part Number	Volume/Size	Increments (ml)
140-1501	1 ml	0.02
140-1502	2 ml	0.05
140-4505	5 ml	0.2
140-4510	10 ml	0.2
140-4520	20 ml	1.0
140-4530	30 ml	1.0
140-4550	50 ml	5.0
140-4600	100 ml	5.0
140-4650	150 ml	10.0
140-4700	200 ml	4.0
140-4750	250 ml	10.0
140-5250	500 ml	10.0
140-5750	1000 ml	20.0



Glass Syringes - Control

Glass Syringes for Industrial and Laboratory uses only. Custom fit - Made in Japan

Part Number	Volume/Size	Increments (ml)
140-3503	3 ml	0.2
140-3505	5 ml	0.2
140-3510	10 ml	0.2
140-3520	20 ml	1.0



Syringe Carrying Cases

The syringe carrying case holds one syringe with volve. The box contains full insulation pads to protect the sample from damaging.

Part Number	Size (inches)	Fits
150-2030	14 x 3 x 2.5	30 ml syringes
150-2050	14 x 3 x 2.5	50 ml syringes
150-2100	15.875 x 3.75 x 2.625	100 ml syringes

Valves

Rugged Construction, made of 100% nylon. All female ports, two of which design to accept luer lock fitting. Manufactured to meet strict ANSI standards, our quality control ensures that the volves you order perform reliably.

Plug Caps

Rugged construction, accepts luer lock fitting. Manufactured to meet strict ANSI standards, our quality control ensures that the volves you order perform reliably.

Part Number	Description	
100-1120	Two-way Valve	
100-1130	Three-way Valve	
100-1212	Un-vented Female PC	
100-1214	Un-vented Male PC	

We provide you with the lab equipment you need, for prices that don't break your budget

In addition to our extensive selection of Glass Syringes and Microsyringes, we also carry the full product line of Ohaus scales, balances and moisture analyzers.

