

PRECISION LIQUID HANDLING



Valves and Fittings



HAMILTON 
THE MEASURE OF EXCELLENCE™

The Measure of Excellence

Hamilton Valves are the highest quality precision valves available. We, at Hamilton Company, combine top quality materials with skilled workmanship, ensuring the highest possible performance level of every precision fluid device that we manufacture. With proper care and handling, Hamilton valves will provide unsurpassed performance in liquid handling year after year.

Hamilton Valves provide the perfect turnkey solution to compliment Hamilton Company's robust valve and syringe drive modules, or manual fluid direction and redirection applications. These valves are designed for use in manual applications or on Hamilton syringe and valve drives where the need for a robust valve is required. The valves are specified to seal and operate with liquids only.



Hamilton (HV) Plug Valves provide an economical and flexible method of custom-building a fluid flow control system, from a simple on/off valve to a more complex multi-valve arrangement, using a combination of loop and distribution valves. The small valve body with its chemically inert flow path is ideally suited for low pressure applications. All HV Plug Valves allow you to select and interchange a wide variety of fittings, adapters and tubing, including male and female luers, FEP tubing assemblies, and adapters which thread directly into the valve providing an endless variety of valve configurations for any flow application. Hamilton (HV) fittings and adapters are installed finger-tight (10 ounce inches) and provide a leak-tight seal tested to 100 psig.



Types of Valves

Hamilton (HV) Plug Valves

The HV valve is physically the smallest valve and constitutes a basic unit for the control of fluids. It is ideal for low pressure applications; from a basic on/off flow to a four-way distribution system.

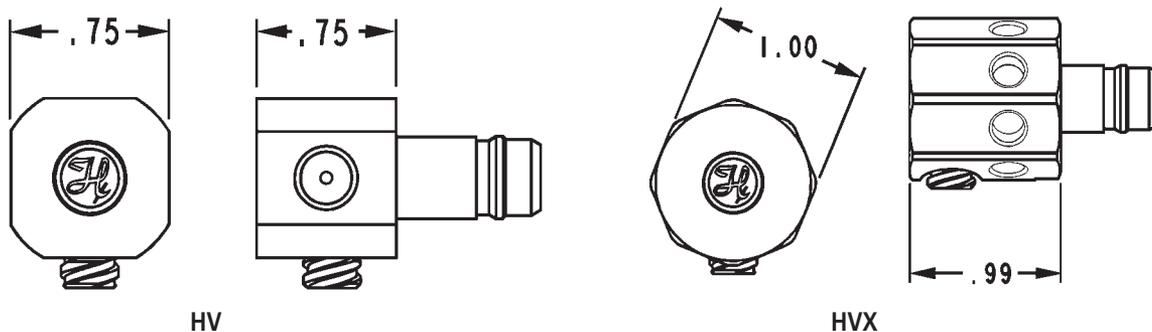
The HVP valve is essentially the same as the HV valve except the HVP can be mounted into panels allowing for custom installation into control panels or instruments.

HVX valves are physically the largest valves. A larger port internal diameter allows increased fluid flows even with moderately viscous fluids. HVX valves can be used free standing or panel-mounted using an optional locking nut, Part # 35121. 6- and 8-port distribution and loop valves are available only in the HVX body style.

Typical Valve Configurations:

Designation	Description
HV	Hamilton Valve, Small Body
HVP	Hamilton Valve, Panel Mount, Small Body
HVX	Hamilton Valve, Large Body
HVM	Hamilton Valve for the Modular Valve Positioner (MVP), Small Body
HVXM	Hamilton Valve for the Modular Valve Positioner (MVP), Large Body
HVI	Hamilton Valve for Precision Syringe Drive Modules (PSD), Small Body
HVXI	Hamilton Valve for Precision Syringe Drive Modules (PSD), Large Body
HVC	Hamilton Valve, Ceramic Flow Path

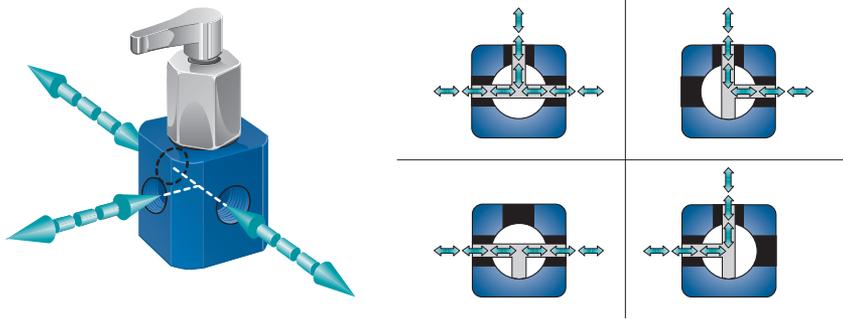
Specifications:



Valve Size	Configuration	Nominal Port Diameter
HV, HVP, HVM, HVI	All	.059"
	2, 3, 4 port	.070"
HVX, HVXM, HVXI	6, 8 port distribution	.059"
	6, 8 port loop	.040"

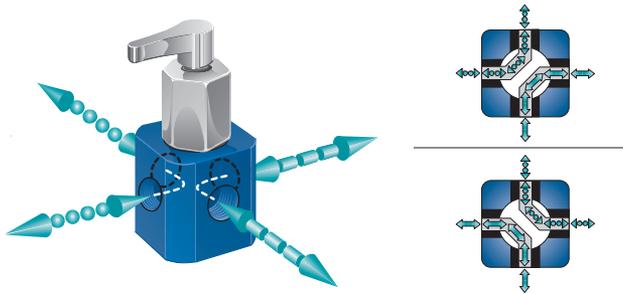
Hamilton (HV) fittings and adapters are installed finger-tight (10 ounce inches) and provide a leak-tight seal tested to 100 psig.

Flow Valves



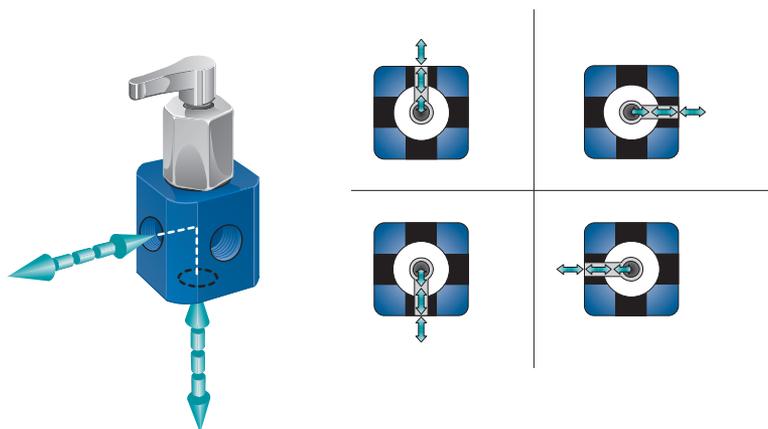
Flow valves are used to direct or redirect fluids. 2-, 3-, and 4 -port valves are available with straight through (180°), 90°, or "T" type plugs for seven different valves. All seven flow configurations are available as HV, HVP and HVX valves. The flow configuration drawings show the possible fluid flow paths for a three port flow valve with a "T" type plug.

Loop Valves



Loop valves are used to direct and redirect fluids. 4-, 6-, or 8- port valves are available with a loop type valve plug. The 4- port valve is available in HV, HVP and HVX body styles. The 6- and 8-port valves are only available in the HVX body style. The flow configuration drawings show the possible fluid flow paths for a 4-port valve with a loop type plug.

Distribution Valves



Distribution valves are used to direct fluid to a number of locations. 2-, 3-, 4-, 6- and 8-port valves are available with a distribution type valve plug. The 2-, 3-, and 4-port distribution valves are available in HV, HVP and HVX body styles. The 6- and 8-port valves are available only in the HVX body style. The flow configuration drawings show the possible fluid flow paths for a 4-port valve with a distribution type plug.

Manual Valves

Hamilton (HV) Plug Valves

- Wetted paths are chemically inert PTFE and Kel-F® materials (100 psig or less)
- Valves are for stand alone use or HVX and HVP valves can also be panel mounted
- Valve position is controlled manually via a handle attached to the valve stem
- Valve connections are via 1/4-28 UNF-2B (Unified Fine) fittings; see specific valve information - thread depths vary

Valve Connections:

Use only HV fittings and adapters for leak-free connections to Hamilton valves



HV



HVP



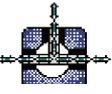
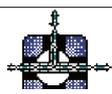
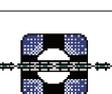
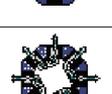
HVX

Hamilton Miniature Inert Valves

	HV	HVP	HVX
Valve Outer Body Dimension	3/4"	3/4"	1"
Port Orifice	.059"	.059"	.118"*
Panel Mounting	No	Yes	Yes
Panel Thickness	N/A	.150" (3.8 mm)	.625" (15.9 mm)

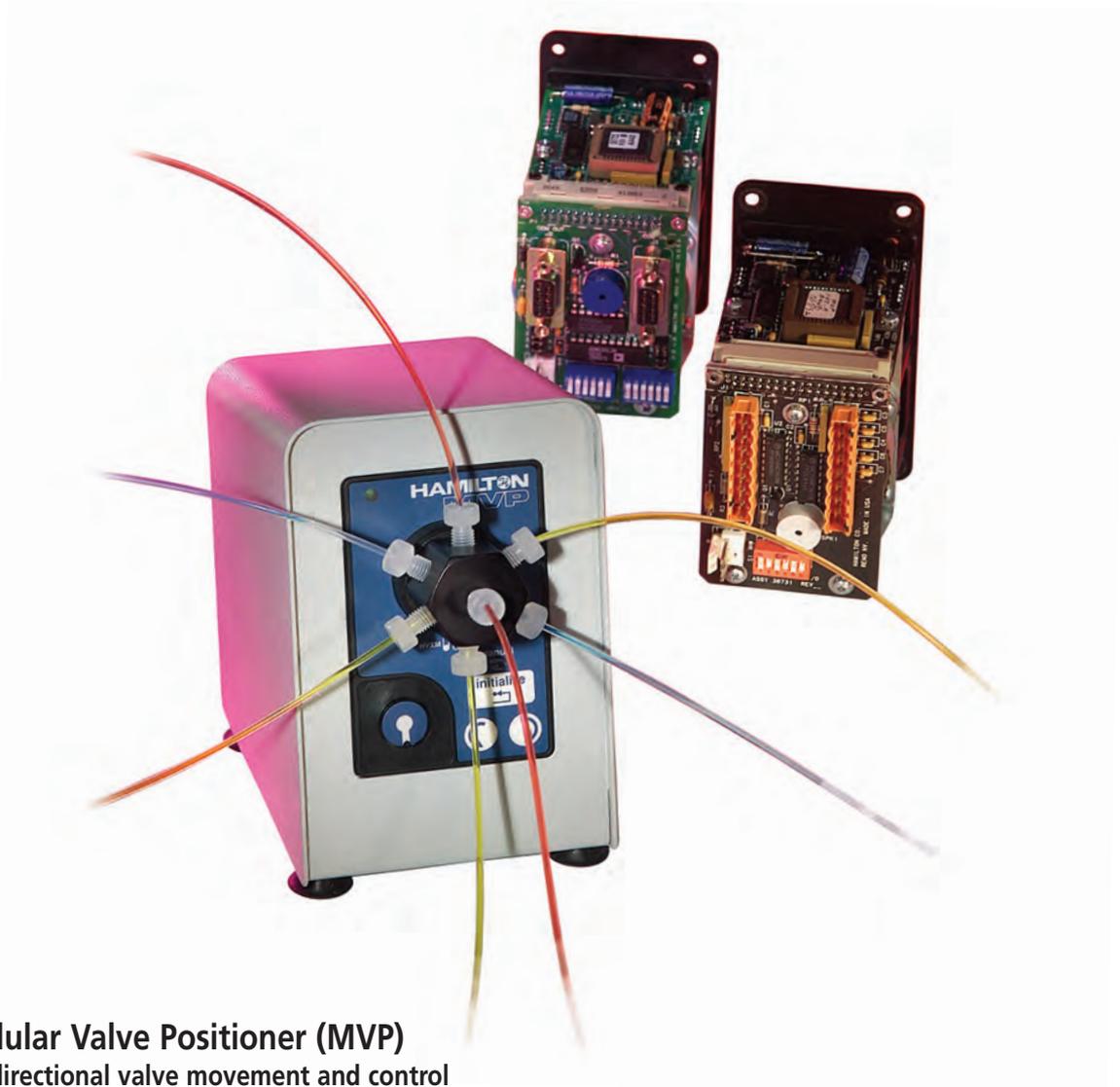
* The port orifice for 6-and 8-way distribution HVX valves is .059".
 The port orifice for 6-and 8-way loop HVX valves is .040".
 HVX valves require optional locking nut, part #35121, for panel mount applications.

Ordering Information

Flow Diagram	Valve Description	Valve Model	 HV	 HVP	 HVX
	180° Flow Path 2-ports	1-1	86725	86775	86901*
	90° Flow Path 2-ports	2-2	86726	86776	86902*
	"T" Flow Path 3-ports	3-3	86727	86777	86903*
	90° Flow Path 3-ports	3-2	86728	86778	86904*
	Loop Flow Path 4-ports	4-4	86729	86779	86905*
	"T" Flow Path 4-ports	4-3	86730	86780	
	90° Flow Path 4-ports	4-2	86731	86781	86907*
	180° Flow Path 4-ports	4-1	86732		
	Distribution Flow Path 2-ports	1-5	86735	86785	86910*
	Distribution Flow Path 2-ports	2-5	86736	86786	86911*
	Distribution Flow Path 3-ports	3-5	86737	86787	86912*
	Distribution Flow Path 4-ports	4-5	86738	86788	86913*
	Distribution Flow Path 6-ports	6-5			86915
	Loop Flow Path 6-ports	6-6			86916**
	Distribution Flow Path 8-ports	8-5			86918
	Loop Flow Path 8-ports	8-7			86919**

Note: All valves have .059"/1.5 mm diameter ports unless otherwise specified.
 * Valve has .118"/3 mm diameter ports. **Valve has .040"/1 mm diameter ports.
 Thread depth: All valves have 1/4" x 28 UNF 2B ψ .250 threads unless otherwise specified.

Valves for Mechanical Drivers



Modular Valve Positioner (MVP)

- Bi-directional valve movement and control
- Easy “snap-in, snap-out” valve replacement automates any of 24 different Hamilton valve configurations
- Wetted paths are chemically inert PTFE and Kel-F® materials

The Modular Valve Positioner (MVP) is a self-contained, bi-directional valve positioner used for fluid selection and redirection. You can choose from two models, digital or RS-232 serial, based on your communication method with the MVP.

Valve Options

Easily remove and replace the valves for different valve configurations. Choose from valves with two to eight ports. Valves are available in chemically inert PTFE, CTFE and ceramic flow paths.

Ordering Information

MVP Valves

Flow Diagram	CTFE	CTFE	Ceramic	Ceramic
	AL Housing	AL Housing	AL Housing	SST Housing
	Part #	Part #	Part #	Part #
	36650			
		36722*		
	36653	36756*	9411-01	9413-01
	36652			
		36758*		
	36717	36780*	9418-01	9419-01
		36779*		

Flow Diagram	CTFE	CTFE	Ceramic	Ceramic
	AL Housing	AL Housing	AL Housing	SST Housing
	Part #	Part #	Part #	Part #
	36654			
	36719	36759*	9415-01	9416-01
		36760		
		36781**		
		36766	9378-01‡	9410-01‡
		36782**		

Note:

All valves have 0.059"/1.5 mm diameter ports unless otherwise indicated.

* 0.118"/3 mm diameter ports.

** 0.040"/1 mm diameter ports.

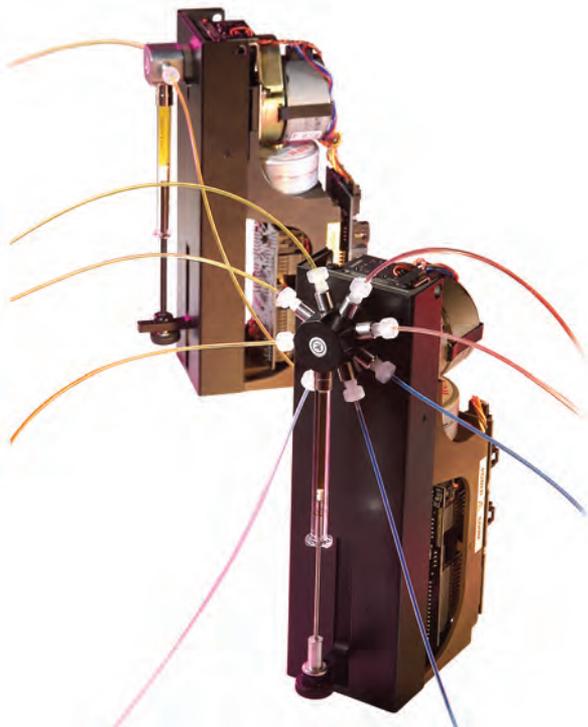
All ceramic thread: 1/4"-28 2B UNF ψ .320" deep deep unless otherwise noted.

All CTFE thread: 1/4"-28 2B UNF ψ .250" deep unless otherwise noted.

‡ Thread: 1/4"-28 2B UNF ψ .285" deep.

Instrument Valves

PSD/2 & 3 Syringe Drive Modules



The PSD/2 & 3 modules are highly integrated, self-contained syringe drive modules that can be used as a single unit or can be daisy chained in a system that uses up to 16 units.

The PSD/2 & 3 can be fitted with a variety of valve and syringe combinations. With a choice of materials like PTFE, CTFE, FEP, UHMWPE, ceramic and borosilicate glass, a reliable turnkey system can be assembled to meet the requirements of the most demanding applications.

PSD/4 & 8 Syringe Drive Modules



The PSD/4 & 8 are compact syringe pumps designed to perform all liquid handling operations including dispensing and diluting.

The modules can be fitted with a choice of valves to meet even the most demanding applications.

Ordering Information

Valves for PSD/2 & 3

Part #	Flow Diagram	Description	Housing Material	Part #	Flow Diagram	Description	Housing Material
5208-01		HVC 3-2	Aluminum	6765-01		HVCX 4-5	Stainless
6763-01		HVC 3-2	Stainless Steel	6500-01		HVCX 8-5	Aluminum
5208-02		HVC 3-5	Aluminum	6766-01		HVCX 8-5	Stainless Steel
6764-01		HVC 3-5	Stainless Steel	39298		HV 3-2, .059" Port	Aluminum, Plastic Plug
6500-02		HVCX 4-5	Aluminum	39221		HV 3-2, .070" Port	Aluminum, Plastic Plug

Note: All **HV** valves have a thread depth of 1/4"-28 2B UNF ψ .250" deep. All **HVC** valves have a thread depth of 1/4"-28 2B UNF ψ .320" deep. All **HVCX** valves have a thread depth of 1/4"-28 2B UNF ψ .285" deep. All HVC and HVCX valves have a ceramic flow path.

Ordering Information

Valves for PSD/4 & 8

Flow Diagram	Description	Ceramic Part #
	"Y" Valve	8778-01*
	"T" 3-2 Valve	8063-01*
	3-5 Valve	7991-01*
	4-5 Valve	7992-01**
	6-5 Valve	9998-01**
	8-5 Valve	7993-01**
	4-2 Valve	9234-01**

Note: All **HVC** valves .060" diameter ports. All **HVCX** valves .050" diameter ports except for the 4-5 configuration.

* Thread depth of 1/4"-28 2B UNF ψ .320" deep. ** Thread depth of 1/4"-28 2B UNF ψ .285" deep.

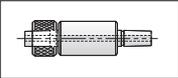
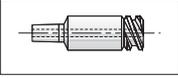
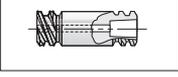
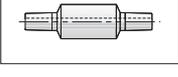
Recommended Fittings

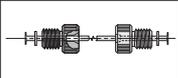
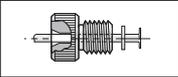
HV and General Laboratory Fittings, Adapters and Tubing

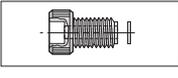
- Use female luer, male luer, luer lock and barbed fittings to connect syringes, equipment, or other devices to Hamilton valves
- Some fittings, e.g. female luer, male luer, luer lock and barbed fittings, are offered in two port diameters for fluid optimization
- Fittings and adapters are Kel-F® (PCTFE) unless otherwise noted

Ordering Information

	Description	Port Diameter	Part #	Compatible with Thread Depth (TD)
	Female Luer, 1/4"-28 UNF	.059"/1.5 mm	35031	.250" or less
	Female Luer, 1/4"-28 UNF	.118"/3.0 mm	35071	.250" or less
	Female Luer, 1/4"-28 UNF	.059"/1.5 mm	32834	.320" or less
	Female Luer, M6x1 inner thread	.059"/1.5 mm	32874	.320" or less
	Male Luer, 1/4"-28 UNF	.059"/1.5 mm	35030	.250" or less
	Male Luer, 1/4"-28 UNF	.118"/3.0 mm	35070	.250" or less
	Male Luer, 1/4"-28 UNF	.059"/1.5 mm	32835	.320" or less
	Male Luer, M6x1 inner thread	.059"/1.5 mm	32875	.320" or less
 Kel-F® and Metal	Male Luer Lock, 1/4"-28 UNF	.059"/1.5 mm	35033	.250" or less
	Male Luer Lock, 1/4"-28 UNF	.118"/3.0 mm	35073	.250" or less
	Male Luer Lock, 1/4" UNF	.059"/1.5 mm	32836	.320" or less
	Male Luer Lock, M6x1 inner thread	.059"/1.5 mm	32876	.320" or less
	1/8" Barb, 1/4"-28 UNF	.059"/1.5 mm	35032	.250" or less
	1/8" Barb, 1/4"-28 UNF	.118"/3.0 mm	35072	.250" or less
	Plug, 1/4"-28 UNF		32802 1/pk	.250" or less
	Plug, 1/4"-28 UNF		88802 10/pk	.250" or less
	Plug, M6x1 inner thread		32852 1/pk	.320" or less
	Plug, M6x1 inner thread		88875 10/pk	.320" or less
	Union, 1/4"-28 UNF		32800 1/pk	.320" or more
	Union, 1/4"-28 UNF		88800 10/pk	.320" or more
 Kel-F® and Metal	Swivel Union, 1/4"-28 UNF	.059"/1.5 mm	35037	.250" or less
 Kel-F® and Metal	Female Luer/Male Luer Lock Connector, 1/4"-28 UNF	.059"/1.5 mm	86513	
	Female Luer Cap, 1/4"-28 UNF		16801	
	Female, M6/Male, 1/4"-28 UNF	.059"/1.5 mm	32821	.320" or less
 Kel-F® and Metal	Male Luer Lock/Threaded Connector, 1/8"-NPT	.059"/1.5 mm	86536	.320" or less
	Male Luer Lock/Male Luer Lock, 1/4"-28 UNF	.059"/1.5 mm	86511	

	Description	Port Diameter	Part #
	Male Luer Lock/Male Luer, 1/4"-28 UNF	.059"/1.5 mm	86512
	Male Luer/Female Luer, 1/4"-28 UNF	.059"/1.5 mm	86507
	Female Luer/Female Luer Connector, 1/4"-28 UNF	.059"/1.5 mm	86505
	Male Luer/Male Luer, 1/4"-28 UNF	.059"/1.5 mm	86506

	Description	Part #	Tubing Gauge	Tubing Length	Thread Type	Compatible with Thread Depth (TD)
	Kel-F® Fittings Assembled with PTFE FEP Tubing	88916	22	12"	1/4"-28	.250" or less
		88917	18	12"	1/4"-28	.250" or less
		88918	12	12"	1/4"-28	.250" or less
		88946	22	12"	1/4"-28	.320" or less
		88947	18	12"	1/4"-28	.320" or less
		88948	12	12"	1/4"-28	.320" or less
		Two Fittings	88950	1/16" O.D., .042" I.D.	25"	M6x1
88952	1/16" O.D., .031" I.D.		25"	M6x1	.320" or less	
88960	1/8" O.D., .095" I.D.		25"	M6x1	.320" or less	
88962	1/8" O.D., .062" I.D.		25"	M6x1	.320" or less	
	One Fitting	88986	22	24"	1/4"-28	.250" or less
		88987	18	24"	1/4"-28	.250" or less
		88988	12	24"	1/4"-28	.250" or less

	Description	Part #	Quantity	Fits Gauge	Thread Type	Compatible with Thread Depth (TD)
	Fitting with washer (no tubing)	88806	10/pk	18-22	1/4"-28	.320" or less
		88842	5/pk	18-22	1/4"-28	.250" or less
		88807	10/pk	12	1/4"-28	.320" or less
		88843	5/pk	12	1/4"-28	.250" or less
	Washer (no tubing)	32882	1/pk	18-22	1/4"-28	
		88882	10/pk	18-22	1/4"-28	
		32883	1/pk	12	1/4"-28	
		88883	10/pk	12	1/4"-28	

	Description	Part #
	Flanging Tool Kit, 120V	88821
	Includes 1 each of the following:	
	Flanging Tool, 120V	32909
	Flanging Tip, 22 gauge	32905
	Flanging Tip, 18 gauge	32906
	Flanging Tip, 12 gauge	32907
Tubing Holder	32903	

General Ordering Information



HAMILTON
THE MEASURE OF EXCELLENCE™

Office Hours:

Weekdays 7 am – 5 pm Pacific Standard Time

Toll Free 1-800-648-5950 or 1-775-858-3000
Fax: 1-775-856-7259

Toll Free Order Hotline:

1-888-525-2123

For your convenience, please have your account number and your purchase order number ready when placing an order.

Major Credit Cards Accepted

**Order Online:**

www.hamiltoncompany.com

Via Email:

sales@hamiltoncompany.com

Terms:

After credit responsibility has been established with Hamilton Company, terms are net 30 days from the date of invoice. A finance charge will be applied to all invoices not paid within 30 days. Unestablished accounts can place an order with a credit card.

Shipping:

All domestic shipments are FOB Reno, Nevada, U.S.A., by United Parcel Service unless otherwise specified. All international shipments are FOB Reno, Nevada, U.S.A., to be shipped as specified by purchaser.

Warranty:

All Hamilton products are unconditionally guaranteed to be free of defects in materials and workmanship for one year (12 months) from date of purchase.

**Returned Goods/
Restocking Charges:**

Any product returned to Hamilton Company for repair, evaluation, or exchange must be accompanied by an assigned Returned Goods Authorization (RGA) tracking number. Unauthorized returns will be refused.

Products returned for credit must also have an assigned RGA tracking number, and are subject to a 20% restocking fee. All returns must be sent to the following address:

Hamilton Company
4990 Energy Way
Reno, Nevada 89502

Standard Conditions of Sales

STANDARD CONDITIONS OF SALE (of Hamilton Company, "The Company")

1. GENERAL

All orders are accepted and executed on the understanding that the Purchaser is bound by the following Standard Conditions of Sale. Where there is any inconsistency between these Standard Conditions of Sale and any conditions which the Purchaser seeks to impose, these Standard Conditions of Sale shall prevail.

Any deviations from these Standard Conditions of Sale shall only be binding upon the Company if the latter has expressly agreed thereto in writing.

2. VALIDITY OF QUOTATIONS

The Company reserves the right to refuse the Purchaser's acceptance of a quotation unless such quotation is stated to be open for a specific period and is not withdrawn in such period.

3. PRICES AND DISCOUNTS

The published prices of the Company's Products are those ruling on the date of publication and are subject to alteration without notice. Prices and currency transactions are in U.S.A. dollars.

4. PAYMENT

Unless otherwise agreed by the Company in writing, the goods shall be paid for in cash within 30 days following the date of the relevant invoice. The Company's prices are net and are not subject to any settlement terms.

The Purchaser may not claim any set-off against the Company. In the event of a delay in payment, the Company shall be entitled to claim, without any notice of default being required and without prejudice to any further rights it may have, interest at a rate of one and a half percent (1 1/2%) per month or at the legal interest rate, whichever is the higher value. All costs of collection shall be fully for the Purchaser's account; extrajudicial costs shall be fixed at ten percent (10%) of the amount owed by the Purchaser and shall be at least fifteen hundred U.S. dollars (USD 1,500.00).

In the event that any payment in respect of Products supplied becomes overdue, the Company may immediately terminate the Purchaser's power of sale under clause 14 of this document and may without prior notice to the Purchaser enter upon the premises of the Purchaser to repossess unpaid goods.

5. NEW ACCOUNTS

Where a credit account is desired, a bank and as many as five trade references may be required. The Company reserves the right not to grant credit to any Purchaser for any reason whatsoever.

6. CARRIAGE

Unless otherwise agreed by the parties, goods are delivered by the Company FOB Reno, Nevada, U.S.A. to the Purchaser's registered office exclusive of duty, insurance, taxes, and VAT. When special delivery arrangements are requested, special rates will be charged.

All delivery times shall be approximate, except if a fixed time of delivery has been specifically agreed to in writing by the Company, in which case a delay in the delivery shall solely entitle the Purchaser to cancel, without costs, the order for the goods not delivered.

7. PACKING

A charge is made when it is necessary to dispatch goods in crates or cases, but this amount will be credited in full on the return, within one month, of the crates or cases in good condition carriage paid. No charge is made for any other form of packing and no credit will be allowed for its return.

8. LOSS OR DAMAGE IN TRANSIT

Clear receipts should be given only if goods have been examined, as an unqualified signature may react to the disadvantage of the Purchaser if the consignment should become the subject of a claim. In the event of short delivery or damage in transit, it is essential that the Company's dispatching depot be advised within two days of receipt of goods.

The following details should be sent in writing to the Company:

- Advice note number
- Carrier's name
- Condition of package
- Date of consignment received
- Extent of damage or shortage

In the event of non-delivery, the Company's dispatching depot should be advised within seven (7) days of the date of invoice. The Company will not be responsible for goods lost or damaged in transit unless the above conditions are observed.

9. DELIVERY

The Purchaser shall be obliged to cooperate in the delivery of the Products and to take receipt of same. The Company may keep any goods refused or not accepted by the Purchaser at the latter party's disposal for account and at the risk of the Purchaser.

10. LIABILITY FOR DELAY

Any times quoted for dispatch, delivery, repair, or replacement are to be treated as estimates only and the Company shall not be liable for failure to dispatch, deliver, repair, or replace within such time unless the Purchaser has suffered loss thereby and the amount payable in respect thereof shall have been agreed in writing as liquidated damages, in which case the Company's liability shall be limited to the amount so agreed to be paid.

In all cases, whether a time for dispatch, delivery, repair, or replacement be quoted or not, the time for dispatch, delivery, repair, or replacement shall be extended by a reasonable period if delay in dispatch, delivery, repair, or replacement is caused by instructions or lack of instructions from the Purchaser or by industrial dispute or by any cause whatsoever beyond the Company's reasonable control.

11. DEFAULT

The Company shall have the right to discontinue delivery and also at its discretion to terminate any agreement in respect of any undelivered goods if the Purchaser defaults in payment as stated under clause 4 of this document or in respect of its other obligations to the Company.

12. DEFECTS AFTER DELIVERY

The Company will make good, by repair at the Company's option, or by the supply of replacement, defects, which under proper use, appear in the goods within a period of 12 calendar months after the goods have been delivered and arise solely from faulty design, materials or workmanship; provided that no complaints shall be admissible unless submitted in writing to the Company within five (5) days after the time of discovery of the defect or after the time the defect should have been discovered, whichever

time comes first, it being understood that the Purchaser shall take reasonable care to discover any defect of whatever nature as soon as possible after taking delivery.

Provided further that in respect of parts or components not of the Company's manufacture, the Company will give the Purchaser a guarantee equivalent to the guarantee (if any) that the Company may have received from the supplier of such parts or components in respect thereof but not so as to impose on the Company in respect of such parts or components a liability greater than that imposed on it by the aforesaid period of this clause.

Save as aforesaid and as provided in clauses 8 and 10, the Company shall not be under any liability in respect of defects in goods delivered or for any injury, damage, or loss resulting from such defects or from any work done in connection therewith and its liability under this clause shall be in lieu of any warranty or condition implied by law as to the quality of fitness for any particular purpose of such goods.

13. SPECIAL ORDERS

All orders for non-standard products or package quantities not included in current Company catalogues and literature, are considered to be special orders and will be dealt with at the discretion of the Company.

14. RESERVATION OF OWNERSHIP/PASSING OF RISK

Products supplied to the Purchaser by way of sale shall remain the property of the Company until payment in full of all its claims on the Purchaser on whatsoever account has been received by the Company but risk in the same shall pass upon delivery.

The Purchaser acting as bailee shall deal with the goods separately and store according to the agreed methods of storage so that the goods not paid for may be clearly identified and shall not be mixed with other goods.

The Purchaser shall be entitled to pass ownership in unpaid goods to third parties provided that all sums received shall be held for the account of the Company.

15. RETURN OF GOODS

The Company does not accept the return of goods for credit unless it is a justified warranty claim. All returns must be authorized in advance. Unauthorized returns will be refused. In no circumstances may goods supplied against a firm order be returned without the Purchaser having first applied for and obtained both written consent and a Returned Goods Authorization (RGA) number from the Company.

The Company reserves the right to refuse the return of any Product that has been used with infectious, microbiological, or radioactive substances or other materials that may be deemed hazardous to the employees of the Company.

A handling charge amounting to not more than 20 percent of the invoice value of the returned goods may be deducted from any credit allowed where it is established that the reason for their return is not subject to the provision of clause 8 or 12 hereof or through any error on the part of the Company.

Goods approved for return must be received by the Company within 30 (thirty) days of the Company's written consent.

16. DESCRIPTIVE MATTER AND ILLUSTRATIONS

All descriptive and forwarding specifications, drawings, and particulars of weights and dimensions issued by the Company are approximate only, and are intended only to present a general idea of the goods to which they refer and shall not form part of a contract.

17. FORCE MAJEURE

Any party will be excused from performing under a sale agreement or any other agreement of which these Standard Conditions of Sale are part if prevented by an event of force majeure including strike, lockout, or other major trouble affecting labor relations.

If any such event of force majeure should last for more than two (2) consecutive months, any party may elect to terminate this Agreement immediately upon giving a written notice to the other party.

18. PATENTS

In the event of any claim being made or action being brought against the Purchaser in respect of infringement of local patents by the user or sale of goods supplied hereunder, the Purchaser is to notify the Company immediately, and the Company shall be at liberty with the Purchaser's assistance if required, but at the Company's expense, to conduct through the Company's own lawyers and experts all negotiations for the settlement of the same or any litigation that may arise therefrom; subject to such notifications and provided that no such goods, or any part thereof, shall be used for any purpose other than that for which the Company supply them, the Company will indemnify the Purchaser in respect of any such claims.

19. TRADEMARKS

- The only Hamilton trademarks that the Purchaser may display to advertise and sell the Products shall be those trademarks under which the Products are sold by the Company to the Purchaser hereunder or such other trademarks expressly authorized by the Company (hereinafter called "the said trademarks") and the Purchaser shall comply with the Company's instructions as to the manner and context in which the said trademarks and the statements to accompany them are displayed.
- No trademarks of the Products shall be undertaken by the Purchaser or any person on the Purchaser's behalf without the Company's prior written consent nor will the Purchaser alter, obliterate, add to, or otherwise interfere with the said trademarks.

20. LEGAL CONSTRUCTION

These Standard Conditions of Sale and all sale contracts to which the same apply shall be construed in accordance with the laws of the State of Nevada, U.S.A., and the authoritative text shall be that in the English language set out herein. Any disputes arising in connection with these Standard Conditions of Sale and all sale contracts to which the same apply shall be finally settled by arbitration in accordance with the laws and rules of the State of Nevada and such proceedings held and located in Reno, Nevada, U.S.A.



HAMILTON
THE MEASURE OF EXCELLENCE™

Hamilton Company
4970 Energy Way
Reno, Nevada 89502 USA
Toll-Free: 800-648-5950
Telephone: +1-775-858-3000
Fax: +1-775-856-7259
e-mail: sales@hamiltoncompany.com

Hamilton Bonaduz AG
Via Crusch 8
CH-7402
Bonaduz/Switzerland
Telephone: +41-(0)81-660-60-60
Fax: +41-(0)81-660-60-70
e-mail: marketing@hamilton.ch

Hamilton Deutschland GmbH
Daimlerweg 5A
64293 Darmstadt/Germany
Telephone: +49-(0)6151-66706-0
Fax: +49-(0)6151-66706-66
e-mail: sales@hamiltongmbh.de

Hamilton Northern Europe
Unit 2, Enterprise Way
Aston Science Park
Birmingham, B7 48H, U.K.
Telephone: +44-(0)121 2600301
Fax: +44-(0)121 2600302
e-mail: sales@hamiltongb.co.uk

Hamilton France S.A.R.L.
Parc de Moulin de Massy
37 rue du Saule Trapu
91300 MASSY
France
Telephone: +33-(0)1-69-75-16-16
Fax: +33-(0)1-60-11-57-16
e-mail: Hamilton.France@wanadoo.fr

Quality Hamilton Products:

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GASTIGHT® Syringes
Chromatography Syringes
Syringes for Life Science
Instrument Syringes
SoftGrip™ Pipettes
Miniature Valves
Modular Valve Positioner
Laboratory Fittings, Adapters & Tubing
Precision Syringe Pumps
MICROLAB® Diluters & Dispensers
Electrochemical Sensors
DURACAL™ Buffer Solutions
HPLC Columns & Resins

Laboratory Automation for:

Drug Discovery
Genomics
Proteomics
Forensic
In Vitro Diagnostics

<http://www.hamiltoncompany.com>
Sales/Support USA 1-888-525-2123

TRADEMARKS:

The following company trademarks have been used in this catalog
Kel-F® is a registered trademark of 3M Company