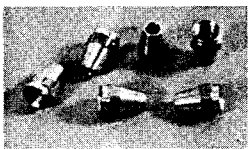




Equipment for Transfer of Liquids from Aldrich Kilo-Lab™ Cylinders

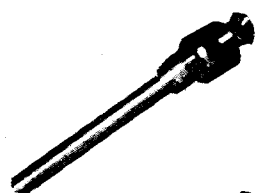
I. ADAPTERS

A. Cylinder-inlet adapters, brass



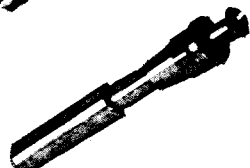
SAE union nut for 1/4-in OD tubing

Catalog No.
Z15,018-5



SAE nut × 1/4-in OD tubing, 4in long, for use as hose connector

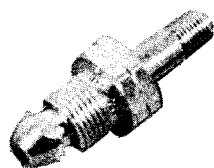
Z15,019-3



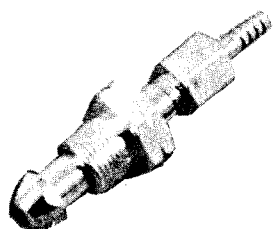
SAE nut × 6-mm ID septum inlet

Z15,020-7

B. Cylinder-outlet adapters, brass

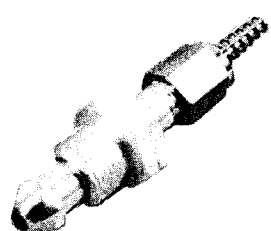


CGA 510 × 1/4-in NPTM **Z14,891-1**



CGA 510 × hose connector for 1/4-in ID tubing

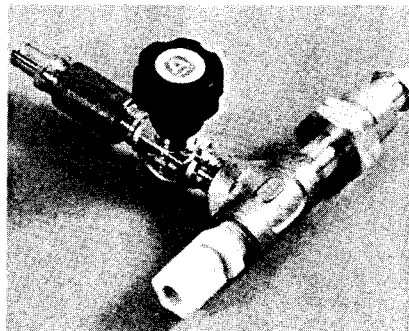
Z14,893-8



CGA 510 × stainless steel hose connector for 1/4-in ID tubing

Z14,894-6

C. Cylinder-outlet adapters

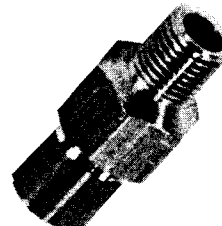


Brass, CGA 510 inlet, with 6-mm ID septum-inlet-equipped needle valve on "T". These are used in conjunction with needle-tubing connectors to fabricate a wide variety of convenient transfer lines for removing liquids from Kilo-Lab cylinders.

Needle valve	Outlet fitting	For tube OD (in)	Catalog No.
Brass	Brass Swagelok®	1/4, copper	Z15,013-4
Brass	Polypropylene comp.	1/4	Z15,014-2
Stainless steel	Polypropylene comp.	1/4	Z15,015-0
Brass	Polypropylene comp.	3/16	Z15,016-9
Stainless steel	Polypropylene comp.	3/16	Z15,017-7

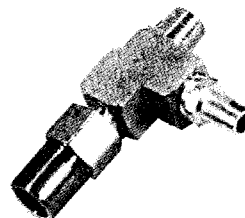
D. Septum-inlet adapters, metal

1/4-in NPTM × septum inlet



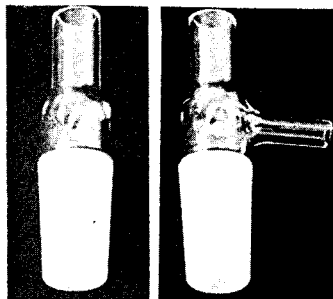
	Septum inlet ID (mm)	Catalog No.
Brass	6	Z11,814-1
Stainless steel	6	Z11,816-8
Brass	7	Z11,817-6
Stainless steel	7	Z11,818-4
Brass	13	Z11,819-2

"T", 1/4-in NPTM × 6-mm ID septum inlet at "T"



	On-the-run septum-inlet ID (mm)	Catalog No.
Brass	6	Z11,820-6
Stainless steel	6	Z11,821-4
Brass	7	Z11,822-2
Stainless steel	7	Z11,823-0
Brass	13	Z11,824-9

E. Septum-inlet adapters, glass

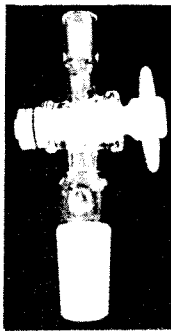


24/40 × 14-mm ID septum inlet

Z15,032-0

24/40 × 14-mm ID septum inlet with 6-mm ID septum-inlet sidearm

Z15,031-2



24/40 × 14-mm ID septum inlet, with Teflon® stopcock

Z15,035-5



24/40 × 14-mm ID septum inlet, with Teflon stopcock and 6-mm ID septum-inlet sidearm

Z15,033-9



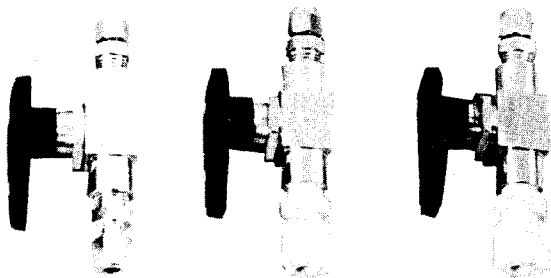
24/40 × 14-mm ID septum inlet, with glass stopcock on sidearm

Z15,034-7

II. CONNECTORS

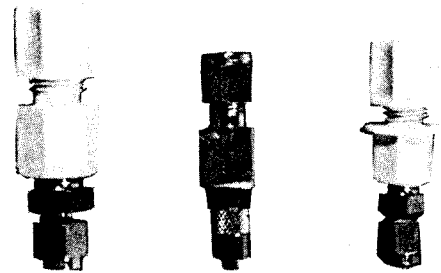
These connectors are used in conjunction with the cylinder-outlet adapters to fabricate a wide variety of convenient transfer lines for removing liquids from Kilo-Lab cylinders. Also, they can be used in pairs with copper, polyethylene, or Teflon tubing to provide very convenient and useful double-tipped lines for nitrogen-pressure transfer of air-sensitive liquids.

A. Ball-valve-equipped needle-tubing connectors with compression fittings



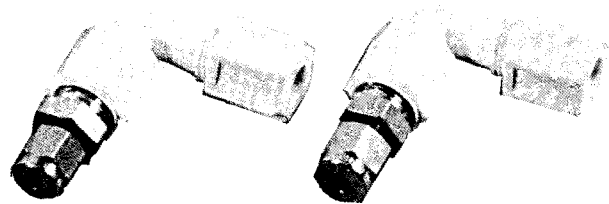
Inlet compression fitting	For tubing OD (in)	Ball valve	Outlet needle connection	Catalog No.
Brass	1/4, copper	Brass	Luer lock	Z14,895-4
Brass	1/4, copper	Brass	1/8 -in Ferrule lock	Z14,896-2
Brass	1/4, copper	Brass	3/16 -in Ferrule lock	Z14,897-0
Polypropylene	1/4	Brass	Luer lock	Z11,766-8
Polypropylene	1/4	Stainless steel	Luer lock	Z11,764-1
Polypropylene	1/4	Brass	1/8 -in Ferrule lock	Z11,768-4
Polypropylene	1/4	Stainless steel	1/8 -in Ferrule lock	Z11,767-6
Polypropylene	1/4	Brass	3/16 -in Ferrule lock	Z11,754-4
Polypropylene	1/4	Stainless steel	3/16 -in Ferrule lock	Z11,753-6
Polypropylene	5/16	Brass	3/16 -in Ferrule lock	Z14,898-9
Polypropylene	5/16	Stainless steel	3/16 -in Ferrule lock	Z14,899-7

B. Needle-tubing connectors with compression fittings



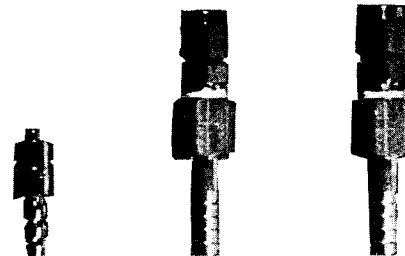
Compression fitting	For tubing OD (in)	Needle connection	Catalog No.
Brass	1/4, copper	Luer lock	Z15,001-0
Brass	1/4, copper	1/8 -in Ferrule lock	Z15,002-9
Brass	1/4, copper	3/16 -in Ferrule lock	Z15,003-7
Polypropylene	1/4	Luer lock	Z11,757-9
Polypropylene	1/4	1/8 -in Ferrule lock	Z11,758-7
Polypropylene	1/4	3/16 -in Ferrule lock	Z11,747-1
Polypropylene	5/16	1/8 -in Ferrule lock	Z15,004-5
Polypropylene	5/16	3/16 -in Ferrule lock	Z15,005-3

C. Needle-tubing connectors with compression fittings, 90° angle



Compression fitting	For tubing OD (in)	Needle connection	Catalog No.
Polypropylene	1/4	Luer lock	Z11,759-5
Polypropylene	1/4	1/8 -in Ferrule lock	Z11,760-9
Polypropylene	1/4	3/16 -in Ferrule lock	Z11,749-8
Polypropylene	5/16	1/8 -in Ferrule lock	Z15,006-1
Polypropylene	5/16	3/16 -in Ferrule lock	Z15,008-8

D. Needle-tubing connectors with hose connectors for 1/4-in ID tubing



Hose connection	Needle connection	Catalog No.
Chrome-plated brass	Luer lock	Z10,116-8
Brass	1/8 -in Ferrule lock	Z11,762-5
Stainless steel	1/8 -in Ferrule lock	Z11,761-7
Brass	3/16 -in Ferrule lock	Z11,752-8
Stainless steel	3/16 -in Ferrule lock	Z11,750-1

III. KILO-LAB CYLINDER SYSTEM

The following are all the component parts needed to fabricate a complete Kilo-Lab cylinder. These are offered as a service to our customers in case a need ever arises to use any of this equipment for a special application.

A. Cylinder-inlet valve, brass, Z14,885-7
 $\frac{1}{4}$ -in NPTM \times $\frac{1}{4}$ -in SAE fittings with cap

B. Cylinder-outlet valve, brass Z14,886-5
 $\frac{3}{4}$ -in NPTM \times CGA 510 with plug

C. Cylinder plus protective cover, mild steel, without valves
Nominal capacity
 8 liters Z14,887-3
 18 liters Z14,888-1

D. Diptube, stainless steel, Z15,164-5
 $\frac{1}{4}$ -in NPTM \times angle-cut end, length 13.5in, for both 8- and 18-liter cylinders

E. Fusible plug, brass, Z14,890-3
 $\frac{1}{4}$ -in NPTM, melting range 338 to 388°F

F. Pressure-relief valve, brass, Z15,009-6
 $\frac{1}{4}$ -in NPTM, set to release at 200 psi

IV. NEEDLES

These stainless steel transfer needles are used with the various needle-tubing connectors to provide the means to penetrate a rubber septum giving an air-tight seal for nitrogen-pressure transfer of air-sensitive liquids.

A. Luer hub, noncoring (deflecting) tip

Gauge	Length (in)	Catalog No.
18	2	Z11,304-2
18	4	Z11,709-9
18	6	Z10,271-7
18	10	Z11,710-2
18	12	Z10,114-1
18	24	Z10,086-2
17	3.5	Z11,305-0
16	2	Z11,706-4
16	4	Z11,707-2
16	6	Z10,878-2
16	10	Z11,708-0
16	12	Z10,879-0
16	24	Z10,087-0
14	2	Z11,700-5
14	4	Z11,701-3
14	6	Z11,702-1
14	10	Z11,704-8
14	12	Z11,705-6
14	24	Z12,674-8
12	2	Z11,694-7
12	4	Z11,695-5
12	6	Z11,696-3
12	10	Z11,697-1
12	12	Z11,699-8
12	24	Z12,672-1

B. $\frac{1}{8}$ -in Ferrule, standard point

Gauge	Length (in)	Catalog No.
11	2	Z11,775-7
11	4	Z11,776-5
11	6	Z11,777-3
11	10	Z11,778-1
11	12	Z11,780-3
11	24	Z15,011-8

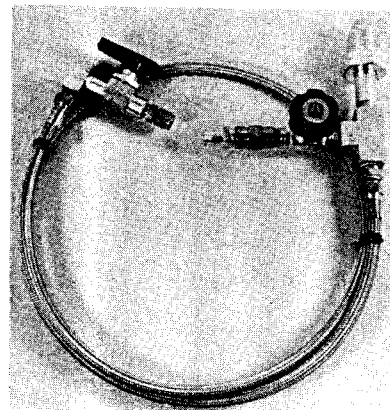
C. $\frac{3}{16}$ -in Ferrule, standard point

Gauge	Length (in)	Catalog No.
7	2	Z11,787-0
7	4	Z11,788-9
7	6	Z11,789-7
7	10	Z11,790-0
7	12	Z11,791-9
7	24	Z15,012-6

V. SEPTA (sleeve stoppers)

For use with	Catalog No.	
	White rubber	Red rubber
6-mm ID (8-mm OD) septum inlets	Z10,072-2	Z12,435-4
7-mm ID (9-mm OD) septum inlets	Z10,073-0	Z12,436-2
13- or 14-mm ID septum inlets	Z10,074-9	Z12,437-0
$\frac{1}{4}$ 24/40 glass joints	Z10,145-1	Z12,439-7

VI. TRANSFER LINES



Convenient fully assembled lines for removing liquid from from Kilo-Lab cylinders. Line consists of a brass CGA 510 fitting connected to a 48-in length of metal-braided Teflon tubing connected to a metal ball valve with metal needle connector. "T" is placed in-line and is equipped with a needle valve and 6-mm ID septum inlet for nitrogen flush of transfer line.

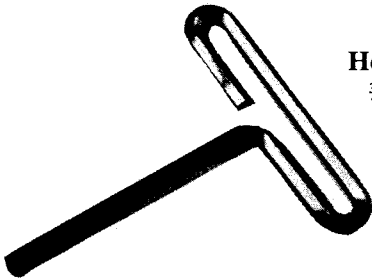
Pipe & valves	Needle connection	Catalog No.
Brass	Luer lock	Z15,021-5
Stainless steel	Luer lock	Z15,022-3
Brass	$\frac{1}{8}$ -in Ferrule lock	Z15,023-1
Stainless steel	$\frac{1}{8}$ -in Ferrule lock	Z15,025-8
Brass	$\frac{3}{16}$ -in Ferrule lock	Z15,026-6
Stainless steel	$\frac{3}{16}$ -in Ferrule lock	Z15,027-4

VII. TOOLS

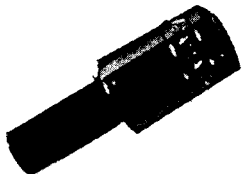
These tools are used to adjust the inlet valve and to remove the plug from the outlet valve on Kilo-Lab cylinders.



Hex wrench,
3/8-in, L-shaped
Z14,882-2



Hex wrench,
3/8-in, "T" handle
Z14,883-0



Hex driver,
3/8-in x socket for 3/8-in
drive
Z14,884-9



Ratcheting box wrench, 1/4-in square opening
Z15,052-5



Wrench, 1/4-in square opening
Z15,163-7

VIII. TUBING

This tubing can be cut to desired length and used with the cylinder-outlet adapters and/or needle-tubing connectors to fabricate a wide variety of transfer lines for the manipulation of air-sensitive liquids.

Copper,

1/4-in OD x 3/16-in ID, length: 15 meters
Z15,051-7

Polyethylene,

low density, length: 30 meters

OD (in)	ID (in)	
1/4	1/8	Z11,743-9
3/16	3/16	Z11,744-7
3/8	1/4	Z11,745-5

Teflon,

length: 3 meters

OD (in)	ID (in)	
1/4	3/16	Z10,760-3
3/16	1/4	Z10,757-3
1/4	1/8	Z14,878-4
3/16	3/16	Z14,879-2
3/8	1/4	Z14,880-6

IX. MISCELLANEOUS

Ball valve, bronze,

1/4-in NPTM x 1/4-in NPTF
Z12,266-1

Grounding strap,

6ft of flat braided bare cable with copper clips at each end
Z15,030-4

Mineral spirits, odorless

26,256-0

Tape, Teflon,

520-in roll, for wrapping male pipe threads to give air- and solvent-tight seals.

1/4-in wide	Z14,881-4
1/2-in wide	Z10,438-8

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Aldrich Chemical Company, Inc. P.O. Box 355, Milwaukee, WI 53201 USA

Telephone 414-273-3850

TWX 910-262-3052

Telex 26 843

FAX 414-273-4979