

# MiniLabo 2

## Regulators - Pressure Reducing

DCATLABO1209XEN2

### Specifications

For other materials or modifications, please consult TESCOM.

#### FLUID MEDIA

Non-corrosive / corrosive gases and mixtures up to 6.0 (99.9999 Vol%) purity

#### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

##### Maximum Inlet Pressure

580 psig / 40.0 bar

##### Outlet Pressure Ranges

22, 58, 145 psig / 1.5, 4.0, 10.0 bar

##### Leak Rate

$10^{-8}$  mbar l/s He

##### Operating Temperature

-4°F to 158°F / -20°C to 70°C

##### Nominal Flow Rate

100 LPM based on Nitrogen

#### MEDIA CONTACT MATERIALS

##### Body

316L Stainless Steel or Chrome-plated Brass

##### Diaphragm

Elgiloy® or Hastelloy®

#### OTHERS

##### Porting Inlet or Outlet

G 1/4" Female

Valve Outlet G 1/8" Female

Optional with Adapter 1/4" NPT

##### Inlet or Outlet Connections

See Part Number Selector

##### Mounting

Wall Mounting Plate 75x100 mm Aluminum Grey/White

##### Cleaning

Cleaned for Oxygen Service

##### Weight (approximate)

**Brass:** 1.5 lbs / 0.7 kg

**Stainless Steel:** 2.6 lbs / 1.2 kg

Hastelloy® is a registered trademark of Haynes International, Inc.

Elgiloy® is a registered trademark of Elgiloy Corp.



TESCOM MiniLabo 2 Point-of-Use regulator for non-corrosive/corrosive gases and mixtures up to 6.0 (99.9999 Vol %) purity with a compact, modular and ergonomic design.

### Applications

- Reduction of line pressure to working pressure
- Laboratory, R&D and analyzer applications
- Suitable for ECD (Electronic Capture Detector) applications

### Features and Benefits

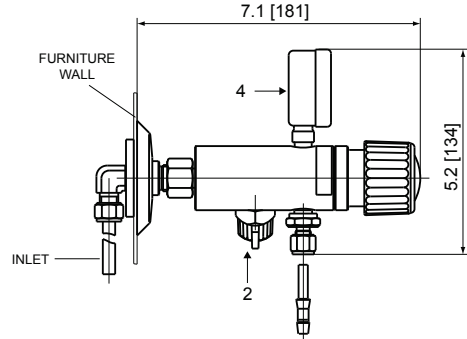
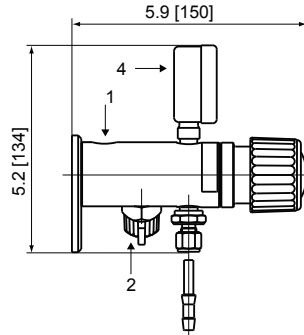
- Clear indication of open/closed position (90°) of shut-off valve
- Minimal space for installation required because pressure regulator and shut-off valve are integrated in one body
- Reduced internal volume, short purging times
- Modular design featuring a pressure regulator, gauge, 1/4 turn shut-off valve and metering valve
- Easy installation due to wall mounting plate

### MiniLabo 2 Regulator Horizontal Drawings

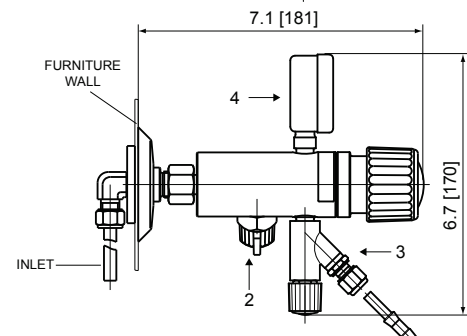
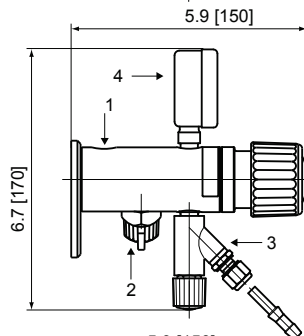
Wall Mounted Version  
(with wall plate)

Furniture Installation Version

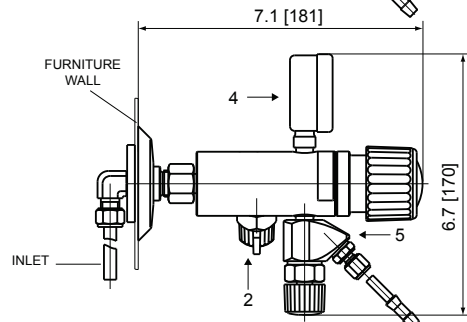
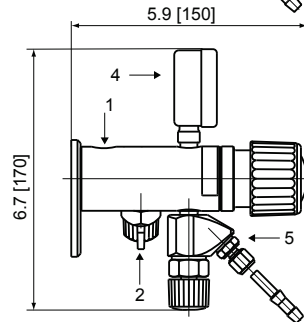
MiniLabo 2 horizontal  
with shut-off valve



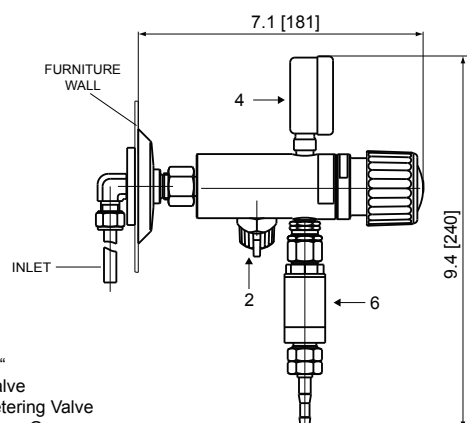
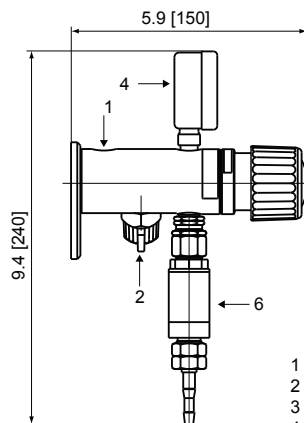
MiniLabo 2 horizontal  
with shut-off valve  
and needle metering valve



MiniLabo 2 horizontal  
with shut-off valve  
and diaphragm metering valve



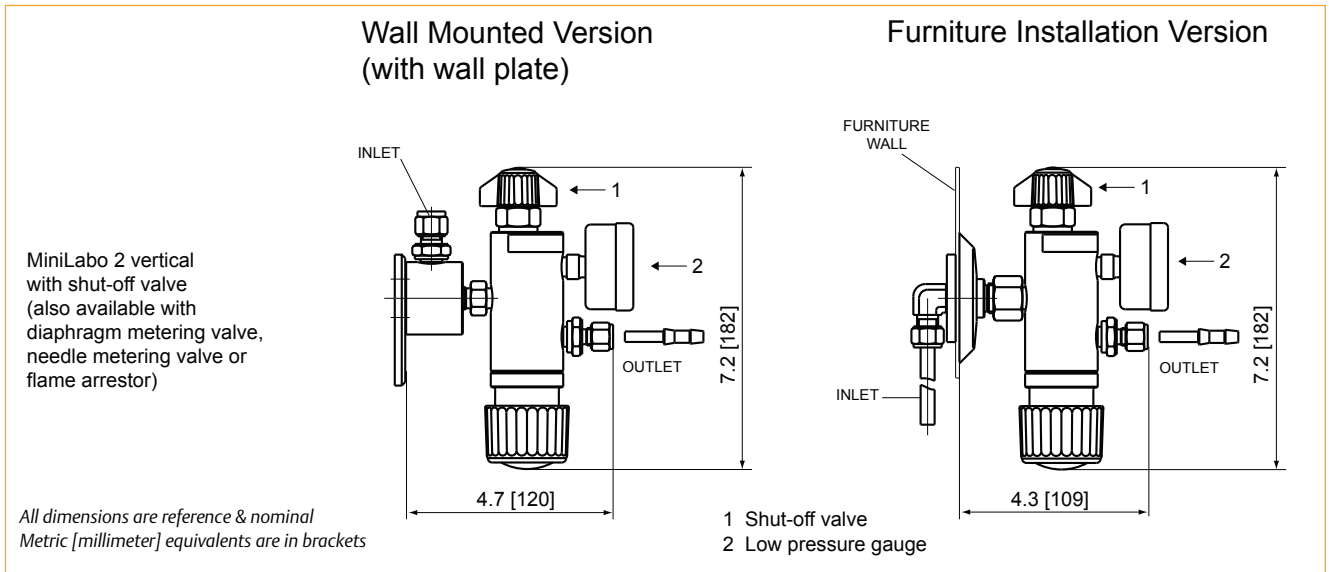
MiniLabo 2 horizontal  
with shut-off valve  
and flame arrestor



- 1 Plug G 1/4"
- 2 Shut-off Valve
- 3 Needle Metering Valve
- 4 Low Pressure Gauge
- 5 Metal Diaphragm Metering Valve
- 6 Flame Arrestor

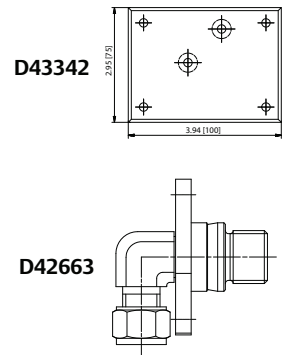
All dimensions are reference & nominal  
Metric [millimeter] equivalents are in brackets

## MiniLabo 2 Regulator Vertical Drawings



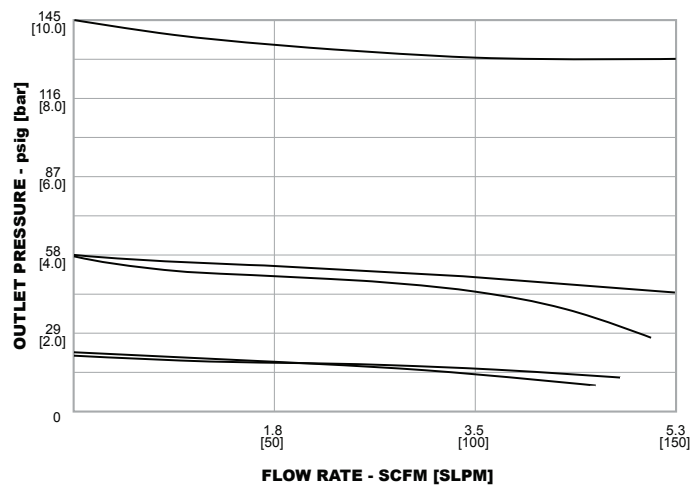
## Accessories for Wall Mounting

PART NUMBER	DESCRIPTION
D43342	Wall mounting plate, grey white, thickness 6 mm
D43371	Kit countersunk screws + dowels for wall plate
D42663-00-X	Wall plate, Brass, including elbow compression fitting 6, 8, or 10 mm
D42663-22-X	Wall plate, Stainless Steel, including elbow compression fitting 6, 8, or 10 mm
V09166	Wall plate cover
D42572	Gas label (please, state gas type)



## MiniLabo 2 Regulator Flow Chart

For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on [www.tescom.com](http://www.tescom.com).



## MiniLabo 2 Regulator Part Number Selector

Repair Kits, Accessories & Modifications may be available for this product. Please contact TESCOM for more information.

Example for selecting a part number:

D43483		AR		03		D		1																					
BASIC SERIES	TYPE OF GAS			OUTLET CONNECTION			INLET CONNECTION			PRESSURE RANGE																			
	AO - Oxygen	AR - Other gases	AK - Corrosive gases	20 - Ammonia *	22 - Acetylene *	23 - Carbon monoxide	00 - None (G 1/4" internal)	02 - Compression Fitting G 1/8"	03 - Compression Fitting ø 6 mm	04 - Compression Fitting G 1/4"	05 - Compression Fitting ø 6 mm with hose connection ø 6 mm	A - G 1/4" female top	B - G 3/8" ball cone rear	C - G 3/8" metal cone fitting top	D - G 3/8" ball cone bottom	E - G 1/4" female top with wall mounting plate	F - Compression fitting 8 mm with wall mounting plate	G - Compression fitting 10 mm with wall mounting plate	H - G 1/4" female rear	J - Compression fitting 6 mm with wall mounting plate	K - Compression fitting 12 mm with wall mounting plate	1 - 21.8 psig / 1.5 bar	2 - 58 psig / 4 bar not for Acetylene	3 - 145 psig / 10 bar not for Acetylene	4 - 43.5 psig / 3 bar not for Acetylene	5 - 72.5 psig / 5 bar not for Acetylene and Hydrogene			
<b>MiniLabo 2 Horizontal Brass</b>																													
D43372	Brass	X	X		X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
D43373	Brass, needle valve	X	X		X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
D43374	Brass, metal diaphragm metering valve	X	X		X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
D43375	Brass flame arrestor	X	X		X	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>MiniLabo 2 Horizontal Brass with Shut-Off Valve</b>																													
D43376	Brass, shut-off valve	X	X		X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
D43377	Brass, shut-off valve, needle valve	X	X		X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
D43378	Brass, shut-off valve, metal diaphragm metering valve	X	X		X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
D43379	Brass, shut-off valve, flame arrestor	X	X		X	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>MiniLabo 2 Horizontal Stainless Steel</b>																													
D43482	Stainless Steel	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
D43483	Stainless Steel, metal diaphragm metering valve	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
<b>MiniLabo 2 Horizontal Stainless Steel with Shut-Off Valve</b>																													
D43484	Stainless Steel, shut-off valve	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
D43485	Stainless Steel, shut-off valve, metal diaphragm metering valve	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
<b>MiniLabo 2 Vertical Brass</b>																													
D43380	Brass, shut-off valve	X	X	X	X	X	X	X	X		X	X	X														X	X	X
D43381	Brass, shut-off valve with needle valve	X	X	X	X	X	X	X	X		X	X	X														X	X	X
D43382	Brass, shut-off valve with metal diaphragm metering valve	X	X	X	X	X	X	X	X		X	X	X														X	X	X
D43383	Brass, shut-off valve with flame arrestor	X	X	X	X	X	X	X	X		X	X	X														X	X	X

**X available**

\* Only for outlet pressure 22 psig / 1.5 bar

\*\* Not for Acetylene and Hydrogen

Gas specific label available on request. Please mention gas type when ordering.