

## Specifications

For other materials or modifications, please consult TESCOM.

### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

#### Fluid Media

**Brass:** All non-corrosive gases, except CO

**Stainless Steel:** All corrosive gases and CO. Use for toxic gases only if confirmed by Tescom and with appropriate purging methods (moisture free vent of toxic gases)

#### Nominal Diameter

DN 2

#### Nominal Pressure PN

290 psig / 20.0 bar

#### Control Range at 44 psig / 3.0 bar Inlet Pressure and 2.5 turns of handknob

0-20 l/min

#### Flow Capacity

$C_v = 0.024$

#### Operating Temperature

-4°F to 158°F / -20°C to 70°C

#### Leak Rate

$<10^{-9}$  mbar l/s

### MEDIA CONTACT MATERIAL

#### Body

Brass or Stainless Steel

#### Surface of Other Parts

Brass, Chromium Plated

#### Diaphragm

Nickel Alloy (Hastelloy®)

### OTHER

#### Weight

**Diaphragm metering valve without wall mounting plate:**

0.66 lbs / 0.3 kg

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



TESCOM Diaphragm Metering Valve provides precision flow control of high purity gases in point-of-use assemblies or in combination with pressure regulators.

### Applications

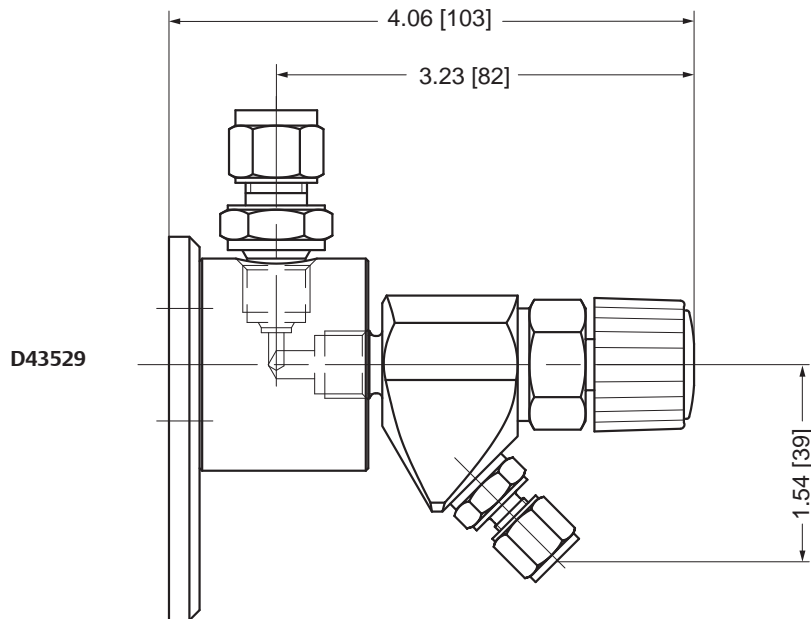
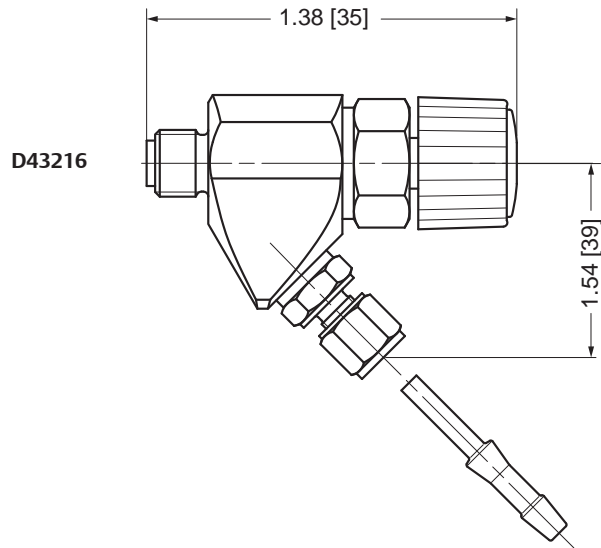
- Controlling the flow of process media with high accuracy
- Laboratory, R&D and analyzer applications
- Suitable for ECD (Electronic Capture Detector) applications

### Features and Benefits

- Precise control of flows
- Almost linear flow characteristic
- Metal-to-metal seals
- For gas purity up to 6.0 (99.9999% purity)
- Suitable for corrosive gases
- Cleaned for Oxygen service

# DIAPHRAGM METERING VALVE

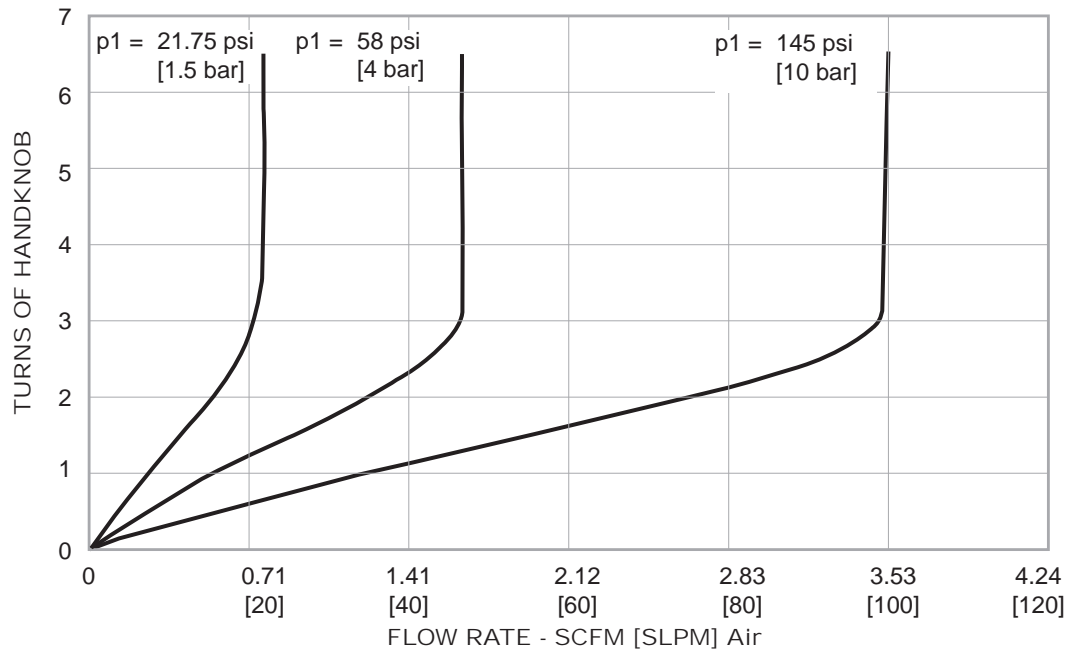
## Diaphragm Metering Valve Drawings



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

## Diaphragm Metering Valve 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).



# DIAPHRAGM METERING VALVE

## Diaphragm Metering Valve 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:

D43215	-	AR	05
BASIC SERIES		GAS	OUTLET CONNECTION
<b>D43215</b> – Brass <b>D43216</b> – Stainless Steel Inlet Connection – G 1/4" male Standard color of handknob and cap: Grey  Please reference datasheet "Point-of-Use Accessories"  Gas specific label acc. EN 13792 available on request		<b>AR (BRASS)</b> – Oxygen, all other non-corrosive gases  <b>Attention: For CO or test gases including CO, please use Stainless Steel version</b>  <b>AK (Stainless Steel)</b> – Corrosive Gases	<b>00</b> – Without (G 1/8" female) <b>05</b> – Compression fitting ø 6 mm with nozzle 6 mm <b>08</b> – Compression fitting tube G 1/4" with nozzle*  <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-left: auto; margin-right: auto;">*Not available for D43216 Stainless Steel</div>

## Diaphragm Metering Valve with Wall Mounting Plate - Part Number Selector

Example for selecting a part number:

D43528	-	AR	02	E
BASIC SERIES		GAS	OUTLET CONNECTION	INLET CONNECTION
<b>D43528</b> – Brass <b>D43529</b> – Stainless Steel		<b>AR (BRASS)</b> – Oxygen, all other non-corrosive gases  <b>Attention: For CO or test gases including CO, please use Stainless Steel version</b>  <b>AK (Stainless Steel)</b> – Corrosive Gases	<b>00</b> – Without (G 1/8" female) <b>02</b> – Compression fitting tube G 1/8" <b>04</b> – Compression fitting tube G 1/4"* <b>05</b> – Compression fitting ø 6 mm with nozzle 6 mm  <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-left: auto; margin-right: auto;">*Not available for D43529 Stainless Steel</div>	<b>E</b> – Without (G 1/8" female) <b>F</b> – Compression fitting ø 8 mm* <b>G</b> – Compression fitting ø 10 mm  <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-left: auto; margin-right: auto;">*Not available for D43528 Brass</div>

## Accessories for Wall Mounting

PART NUMBER	DESCRIPTION
D43342	Wall mounting bracket
D43371	Kit countersunk screws and dowels for wall plate
D42663-00-X	Wall plate, Brass
D42663-22-X	Wall plate, Stainless Steel (for Acetylene)
V09166	Wall plate cover, grey
D42572	Gas label