

Diaphragm Metering Valve

On/Off and Shut-off Valves

DCATLABO12161XEN2

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

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.

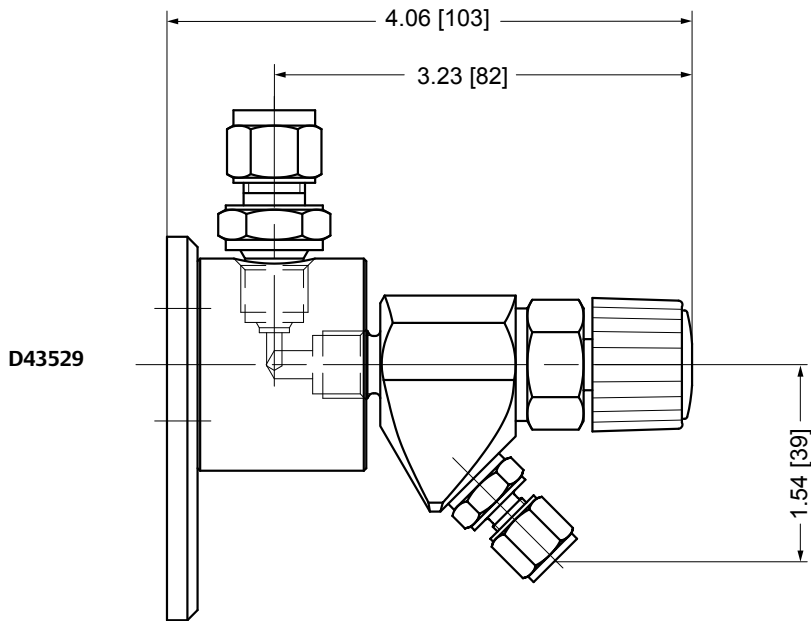
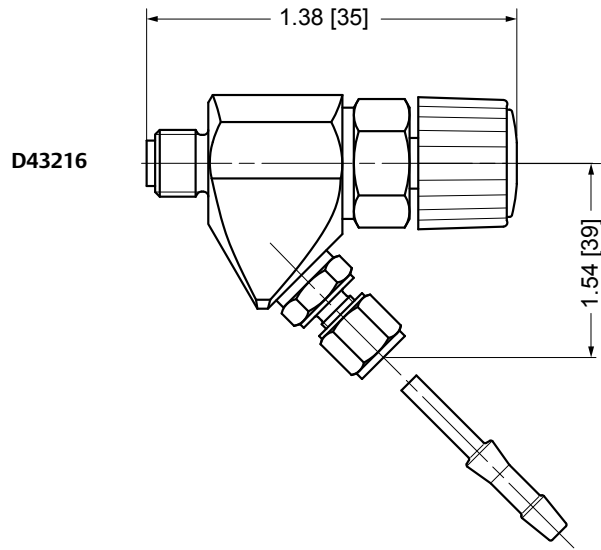
Applications

- 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

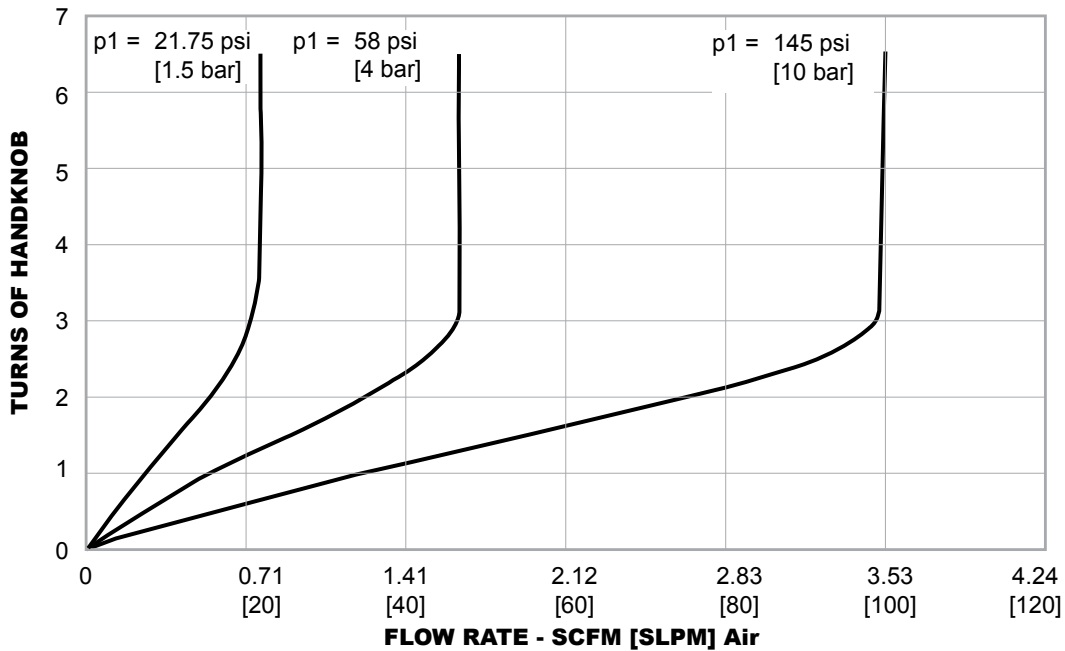
Diaphragm Metering Valve Drawings



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.



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 | - | AO | 05 |
|--|---|--|--|
| BASIC SERIES | | GAS | OUTLET CONNECTION |
| <p>D43215 – Brass D43216 – Stainless Steel Inlet Connection – G 1/4" male Standard color of handknob and cap: Grey</p> <p>Please reference datasheet "Point-of-Use Accessories"</p> <p>Gas specific label acc. EN 13792 available on request</p> | | <p>AO (BRASS) – Oxygen, all other non-corrosive gases</p> <p>Attention: For CO or test gases including CO, please use Stainless Steel version</p> <p>AK (Stainless Steel) – Corrosive Gases</p> | <p>00 – Without (G 1/8" female) 05 – Compression fitting ø 6 mm with nozzle 6 mm 08 – Compression fitting tube G 1/4" with nozzle*</p> <p style="border: 1px solid black; padding: 2px; margin-top: 10px;">*Not available for D43216 Stainless Steel</p> |

Diaphragm Metering Valve with Wall Mounting Plate - Part Number Selector

Example for selecting a part number:

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

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 |



WARNING! Do not attempt to select, install, use or maintain this product until you have read and fully understood the TESCOM Safety, Installation and Operation Precautions.