

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

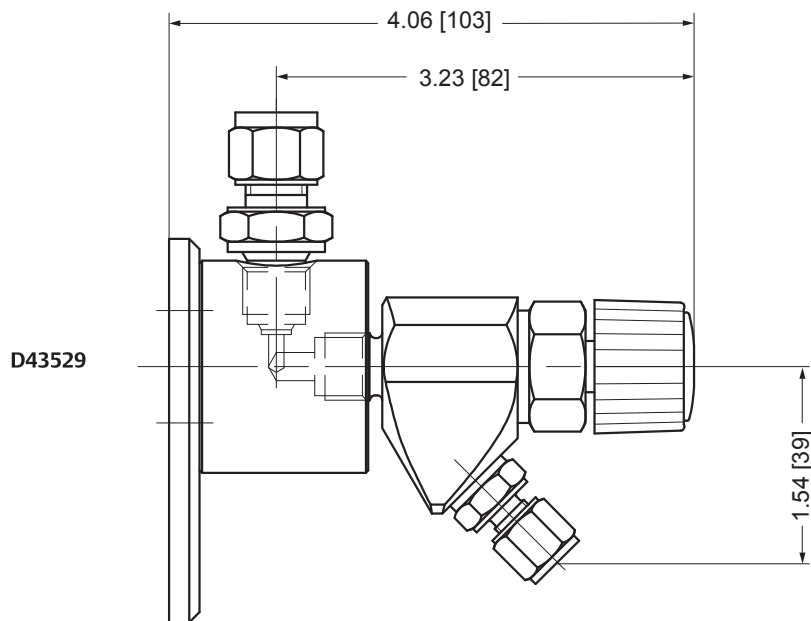
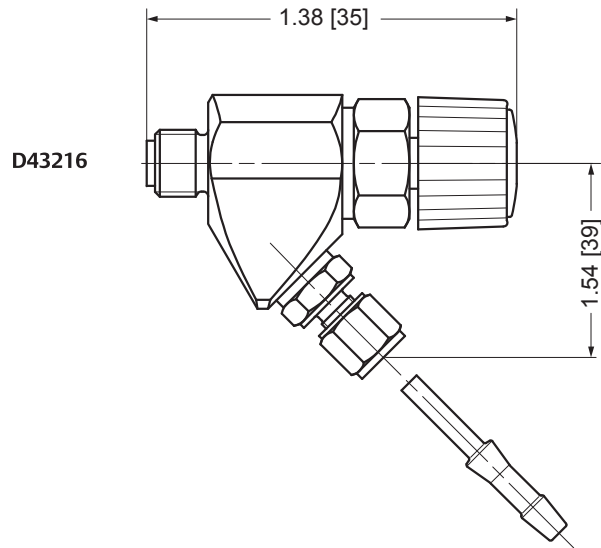
- Controlling the flow of process media with high accuracy
- Laboratory, R&D and analyzer applications
- Suitable for ECD (Electronic Capture Detector) applications

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

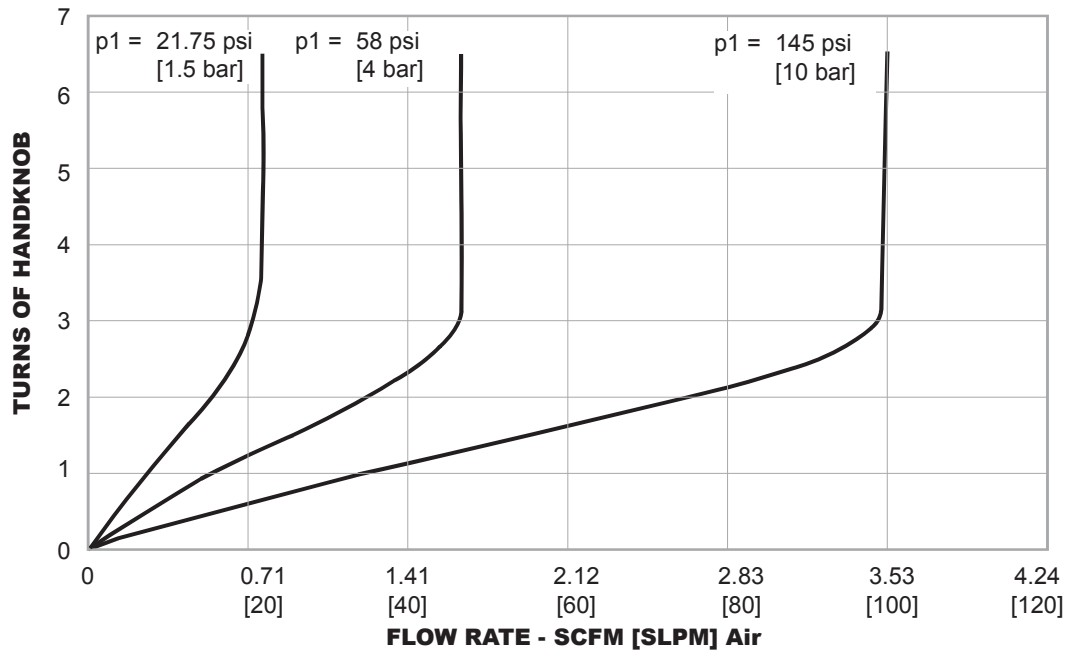
Diaphragm Metering Valve Drawings



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.



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
D43215 – Brass D43216 – 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	AR (BRASS) – Oxygen, all other non-corrosive gases Attention: For CO or test gases including CO, please use Stainless Steel version AK (Stainless Steel) – Corrosive Gases	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* <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
D43528 – Brass D43529 – Stainless Steel	AR (BRASS) – Oxygen, all other non-corrosive gases Attention: For CO or test gases including CO, please use Stainless Steel version AK (Stainless Steel) – Corrosive Gases	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 <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-left: auto; margin-right: auto;">*Not available for D43529 Stainless Steel</div>	E – Without (G 1/8" female) F – Compression fitting ø 8 mm* G – 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