

WEGA 1 and 2

Regulators - Pressure Reducing

DCATLAB012105XEN2

Specifications

For other materials or modifications, please consult TESCOM.

FLUID MEDIA

Non-corrosive gases and gas mixtures up to 6.0 (99.999 Vol %) purities
Stainless Steel versions for calibration gases with NH₃, SO₂, or NO content (ppm range)

OPERATING PARAMETERS

Maximum Inlet Pressure

2900 psig / 200 bar
4350 psig / 300 bar (optional)

Outlet Pressure Ranges

Single-stage: 7.3-58, 14.5-145, 29-290 psig
0.50-4.0, 1.00-10.0, 2.0-20.0 bar

Dual-stage: 1.5-22, 7.3-58, 14.5-145 psig
0.10-1.5, 0.50-4.0, 1.00-10.0 bar

Leakage Rate Against Atmosphere

10⁻⁸ mbar l/s He

Nominal Flow

10 m³/h (depending on pressure and gas)

Inlet Connection

According to DIN 477-1 (2900 psig / 200 bar) or
DIN 477-5 (4350 psig / 300 bar)
Other national standards on request

Outlet Connection

Regulator: G 1/4" female
Valve: G 1/8" female

Standard Outlet Connection Mounted

6 mm compression fitting including 6 mm hose connector

Options at Outlet

Needle or diaphragm metering valve

MEDIA CONTACT MATERIALS

Body

Stainless Steel 1.4404 / 316L or Nickel-plated Brass

Diaphragm

316L Stainless Steel

Relief Valve

FKM

OTHER

Weight

Wega 1: 3.30 lbs / 1.5 kg

Wega 1: 3.75 lbs / 1.7 kg (with Flowmeter)

Wega 2: 4.20 lbs / 1.9 kg

Wega 2: 4.65 lbs / 2.1 kg (with Flowmeter)



TESCOM single-stage WEGA 1 and dual-stage WEGA 2 cylinder pressure regulators are for gas purities up to 6.0 quality. A relief valve is integrated into the body for low internal gas volume. Both models are lightweight with a compact design.

Applications

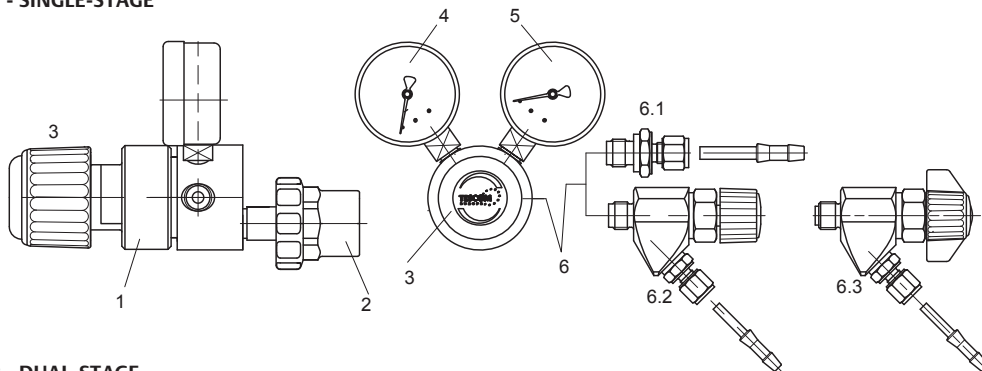
- Reduction of high pressure gases in storage cylinders to a low operating pressure
- For calibration gases with NH₃, SO₂, or NO content

Features and Benefits

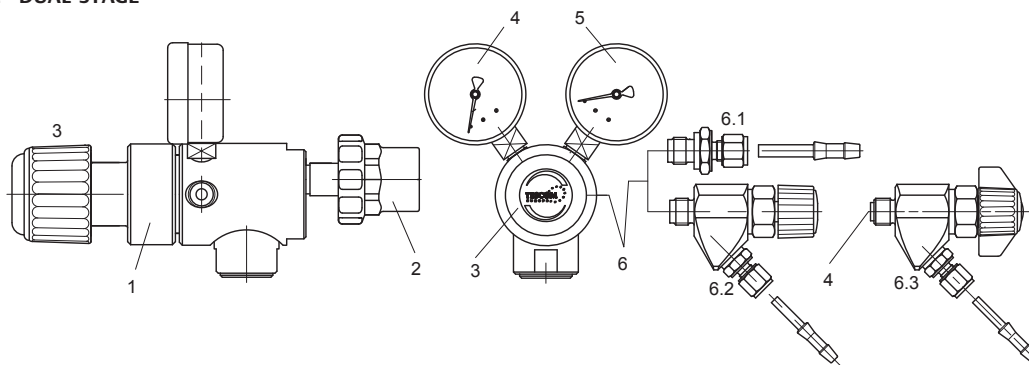
- Maximum inlet pressure of 2900 psig / 200 bar or 4350 psig / 300 bar (new 4350 psig / 300 bar cylinder technique)
- Modular inlet and outlet connectors offers versatility
- Relief valve integrated into the body
- Dual-stage version avoids decaying inlet pressure deviation
- Low internal gas volume
- Compact dual-stage version

WEGA 1 and 2 Adjustable Regulator Drawings

WEGA 1 - SINGLE-STAGE



WEGA 2 - DUAL-STAGE



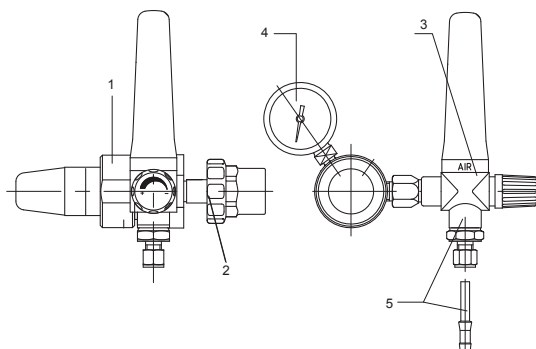
- 1 - BASIC UNIT
- 2 - INLET CONNECTION
- 3 - PRESSURE ADJUSTING HANDWHEEL

- 4 - HIGH PRESSURE GAUGE (P1)
- 5 - LOW PRESSURE GAUGE (P2)
- 6 - OUTLET CONNECTION

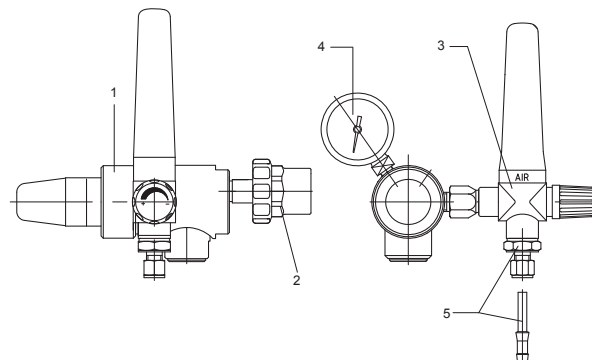
- 6.1 - COMPRESSION FITTING
- 6.2 - DIAPHRAGM METERING VALVE
- 6.3 - DIAPHRAGM SHUT-OFF VALVE

WEGA 1 and 2 Preset Regulator with Flow Meter Drawings

WEGA 1 - SINGLE-STAGE WITH FLOW METER



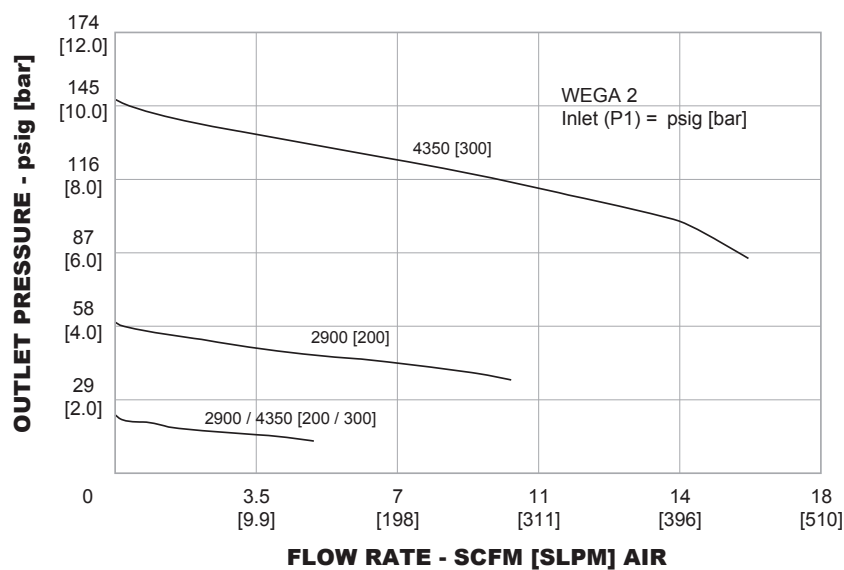
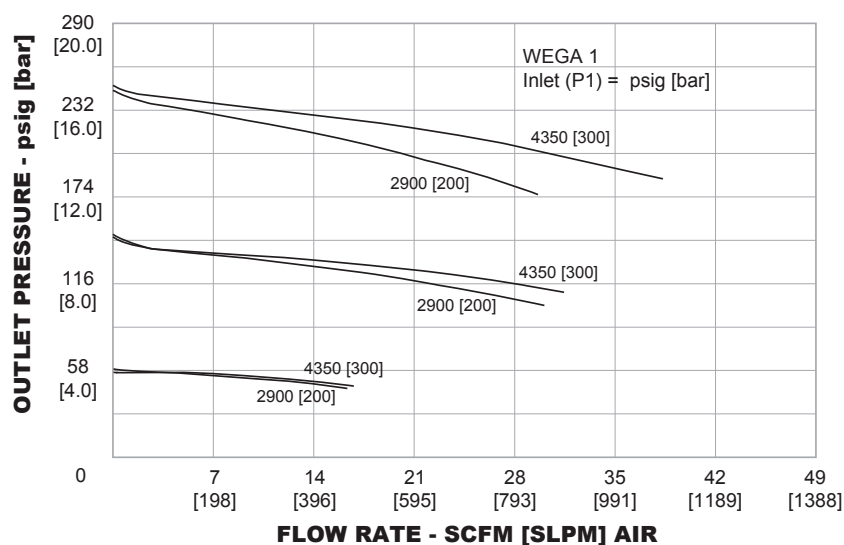
WEGA 2 - DUAL-STAGE WITH FLOW METER



- 1 - BASIC UNIT
- 2 - INLET CONNECTION
- 3 - METERING VALVE WITH FLOW METER
- 4 - HIGH PRESSURE GAUGE (P1)
- 5 - OUTLET CONNECTION (COMPRESSION FITTING)

WEGA 1 and 2 Regulator Flow Charts

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.



Notice

If you do not want to use the ordering system it is important to specify the following items:

- Gas or gas mixture
- Inlet pressure (P1): 2900 or 4350 psig / 200 or 300 bar
- Outlet pressure (P2): check last column of ordering information
- Flow per minute or hour
- Outlet connection e.g. compression fitting, hose connector, none (= female thread)
- Options such as shutoff or metering valve and flow meter
- For CO or gas mixtures containing CO, please choose Stainless Steel version

WEGA 1 and 2 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:

D45170	-	NS	-	44	-	3
BASIC SERIES	INLET CONNECTION DEPENDING ON NATIONAL STANDARDS		OUTLET CONNECTION PROCESS GAS RANGE		OUTLET PRESSURE	
D45170 - WEGA 1 single-stage, Nickel-plated Brass D45176 - WEGA 2 dual-stage, Nickel-plated Brass D45173 - WEGA 1 single-stage, Stainless Steel D45179 - WEGA 2 dual-stage, Stainless Steel	Available inlet connectors / Cylinder valve standards: DIN 477-1- 2900 psig / 200 bar Germany DIN 477-5- 4350 psig / 300 bar Germany NEN 3268 Netherlands BS 341 U.K. AFNOR / NF E 29-650 France CGA-V1 U.S.A. UNI 11144 Italy <i>For other standards, please consult TESCOM.</i>		00 - G 1/4" female 05 - 6 mm fitting, with 6 mm hose connector 08 - 8 mm fitting, with 8 mm hose connector***, * 35 - Needle metering valve, 6 mm fitting, with 6 mm hose connector* 44 - With diaphragm metering valve, 6 mm fitting, with 6 mm hose connector** 62 - With diaphragm shut-off valve, 6 mm fitting, with 6 mm hose connector * Only Brass ** Only Stainless Steel *** Only dual-stage **** Only single-stage		1 - 1.5-22 psig*** / 0.10-1.5 bar 2 - 7.3-58 psig / 0.50-4.0 bar 3 - 14.5-145 psig / 1.00-10.0 bar 4 - 29-290 psig**** / 2.0-20 bar	

- Please specify gas to identify inlet connector according to national standards.
- For gas mixtures, please consult your gas supplier for the connection number or cylinder valve thread.
- Please reference "Cylinder Valve Connections" in the TESCOM catalog for additional information.
- For CO or gas mixtures containing CO, please select Stainless Steel.

WEGA 1 and 2 with Flow Meter Part Number Selector

D45395	-	NS	-	05	-	3
BASIC SERIES	INLET CONNECTION DEPENDING ON NATIONAL STANDARDS		OUTLET CONNECTION PROCESS GAS RANGE		FLOW	
D45395 - WEGA 1 single-stage, Nickel-plated Brass with flow meter D45178 - WEGA 2 dual-stage, Nickel-plated Brass with flow meter	Available inlet connectors / Cylinder valve standards: DIN 477-1- 2900 psig / 200 bar Germany DIN 477-5- 4350 psig / 300 bar Germany NEN 3268 Netherlands BS 341 U.K. AFNOR / NF E 29-650 France CGA-V1 U.S.A. UNI 11144 Italy <i>For other standards, please consult TESCOM.</i>		00 - G 1/4" female 05 - 6 mm fitting, with 6 mm hose connector 08 - 8 mm fitting, with 8 mm hose connector * Only Brass ** Only Stainless Steel *** Only dual-stage **** Only single-stage		A - 0.06 to 1 SLPM B - 0.5 to 4 SLPM C - 2 to 16 SLPM D - 4 to 32 SLPM****	

- Please specify gas to identify inlet connector according to national standards.
- For gas mixtures, please consult your gas supplier for the connection number or cylinder valve thread.
- Please reference "Cylinder Valve Connections" in the TESCOM catalog for additional information.
- For CO or gas mixtures containing CO, please choose Stainless Steel.

REPAIR KITS:

PART NUMBER	REGULATOR SERIES
D43441	WEGA 1, Brass
D43442	WEGA 1, Stainless Steel
D43439	WEGA 2, Brass
D43440	WEGA 2, Stainless Steel

ACCESSORIES: Reference WEGA Accessories datasheet