

WEGA-SP

Regulators - Pressure Reducing

DCATLAB012173X012

Specifications

For other materials or modifications, please consult TESCOM.

MEDIA

For inert and corrosive gases.
For high purity calibration gases / gas mixtures.

OPERATING PARAMETERS

Maximum Inlet Pressure

2900 psig / 200 bar

Outlet Pressure Ranges

7.25–21.75, 7.25–58, 14.5–101.5, 14.5–145 psig
0.5-1.5, 0.5-4.0, 1.0-7.0, 1.0-10.0 bar

Leakage Rate Against Atmosphere

2×10^{-8} atm cc/sec He

Nominal Flow Capacity

10 m³/h (according to pressure and used gas)

$C_v = 0.06$

$C_v = 0.15$

$C_v = 0.24$ optional

Temperature Range

Seat PCTFE: -25°C to +60°C [-13°F to 140°F]

Seat TEFLON® PFA 350/PTFE: -25°C to +74°C [-13°F to 165°F]

Optional

Higher outlet pressure up to 500 psig / 35 bar

Relief valve with captured venting

Shut-off and metering valve at outlet

Absolute pressure version

MEDIA CONTACT MATERIALS

Body

316 Stainless Steel

Diaphragm

316 Stainless Steel, Hastelloy®

Seat

PCTFE, PTFE

Purging Seat

EPDM, FKM

OTHER

Inlet Connection

According to national standards like DIN477-1, CGA V-1 and BS341

Outlet Connection

1/4" NPTF female or compression fitting

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



WEGA-SP with manual connection & O-ring

TESCOM WEGA-SP (single stage) with integrated purge function includes shut-off function and check valve and is specially designed for use with corrosive or toxic gases and gas mixtures. The integrated purging device effectively removes residual moisture, aerial oxygen and remaining process gas.

Applications

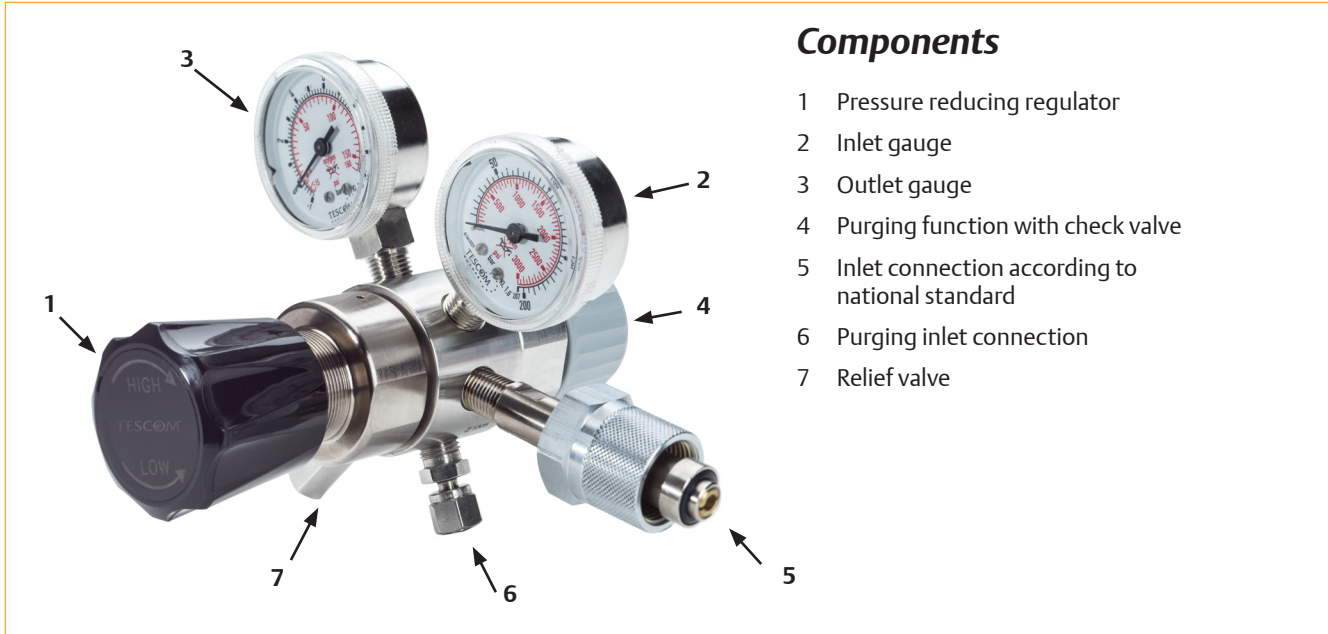
- Pressure reduction of corrosive or toxic gas from pressure cylinders by inducting the purge gas. The process gas will be effectively eliminated from the regulator and the cylinder connection.
- Ideal for use in laboratories.

Features and Benefits

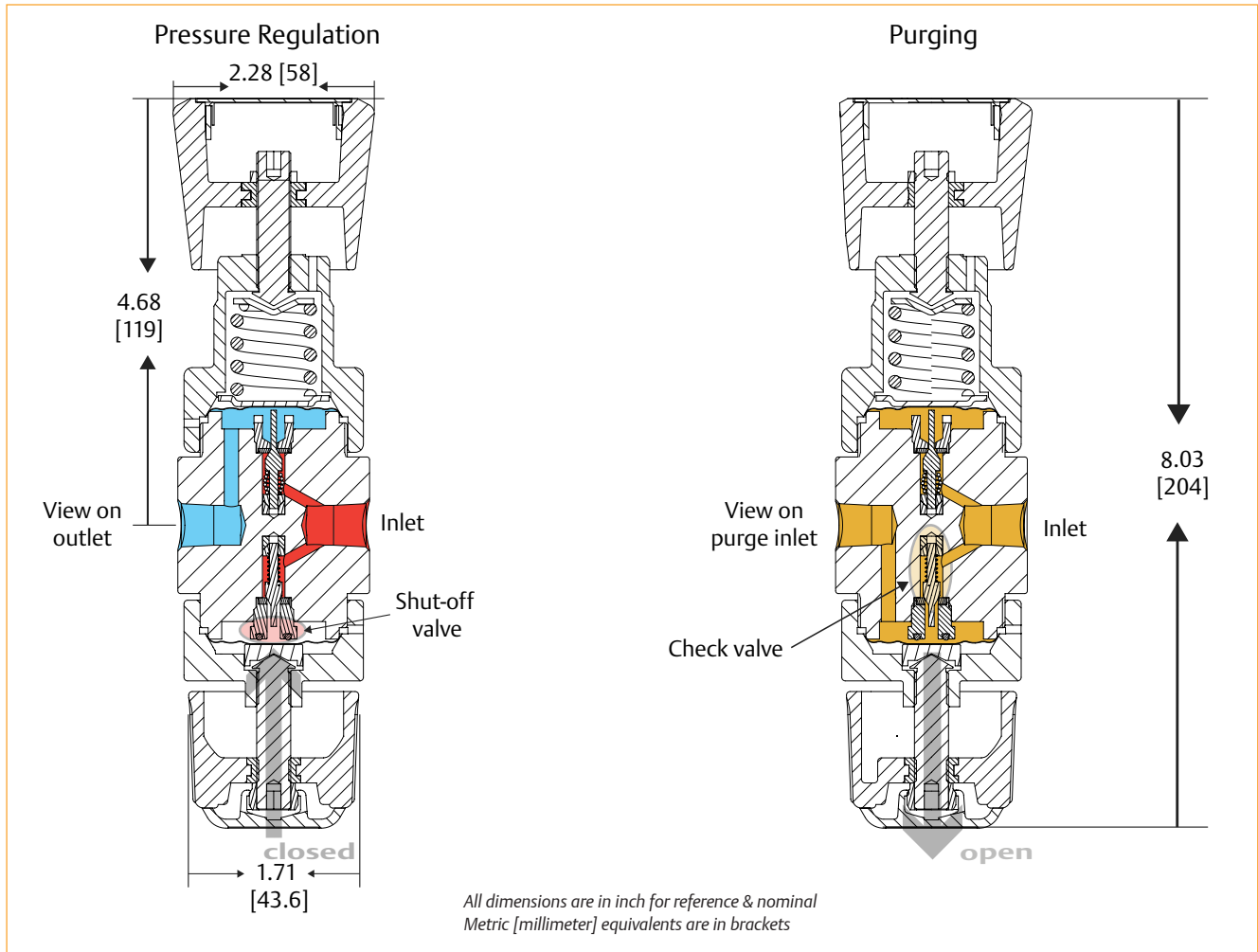
- Compact design without externally mounted purging device. Reduces weight, internal volume and installation length.
- Effective purging due to integrated purge valve and check-valve, low purge gas consumption, minimized risk of corrosion.
- Reduces consumption of expensive calibration gases and test gases because residual moisture and external gases are eliminated before starting-up the process.
- Optional tied diaphragm "positive seal" design provides additional shut-off assistance for corrosive gases.
- Valve trim and diaphragm made of Hastelloy® are available for extended life by reducing corrosion.
- Minimized helium leak rate due to reduced number of connections.

WEGA-SP with Integrated Purging Function

Assembly

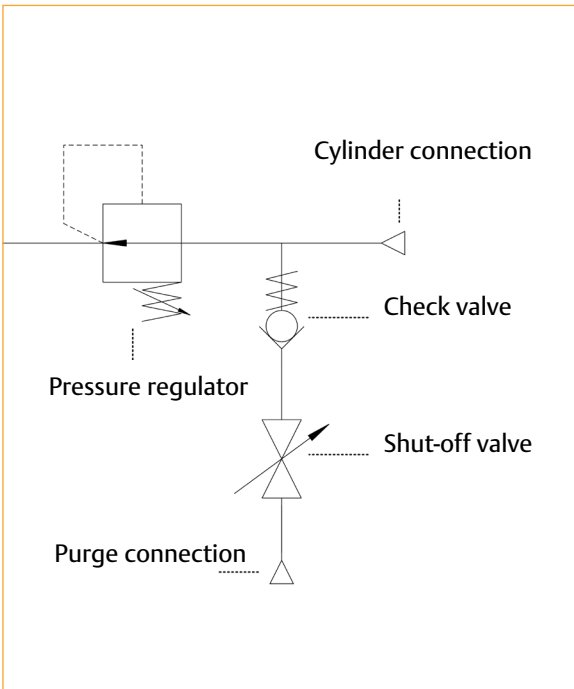


Dimension Drawing

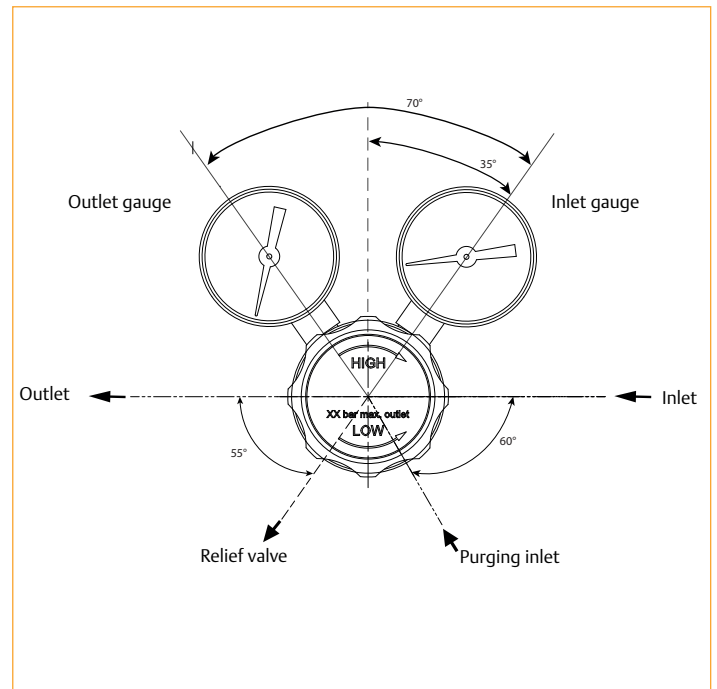


WEGA-SP with Integrated Purging Function

Functional Drawing

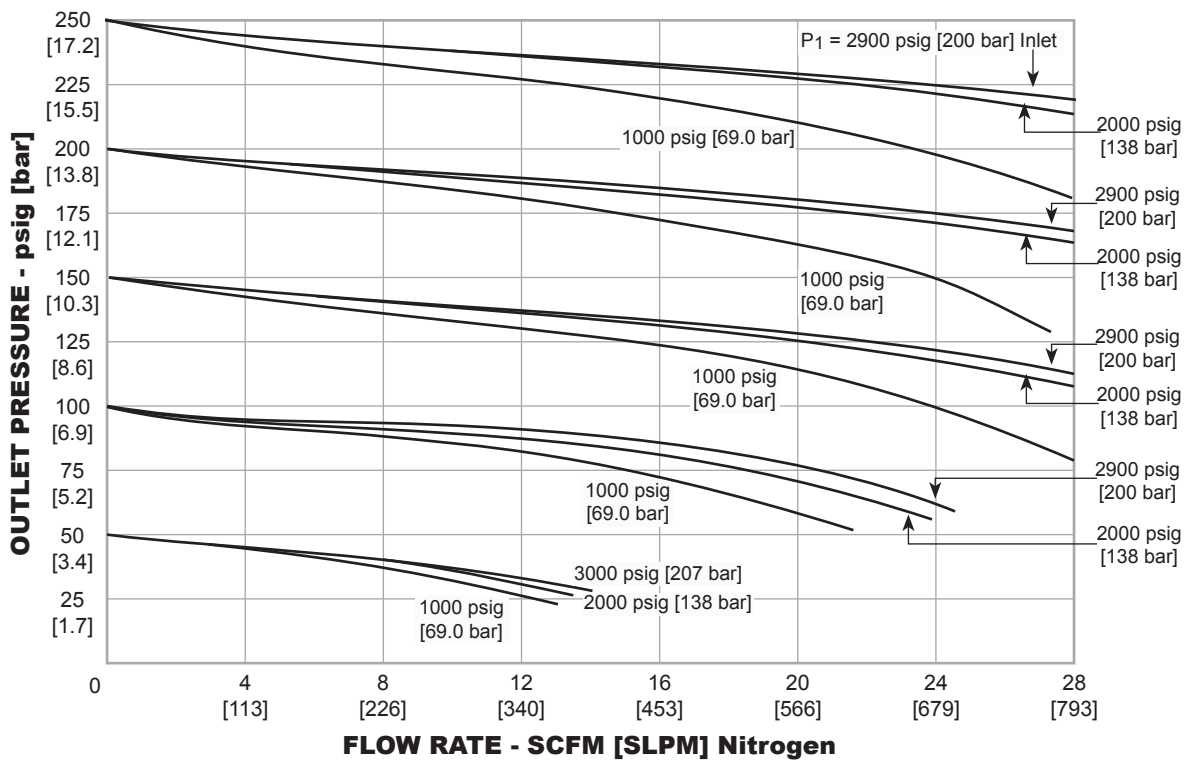


Connection Configuration

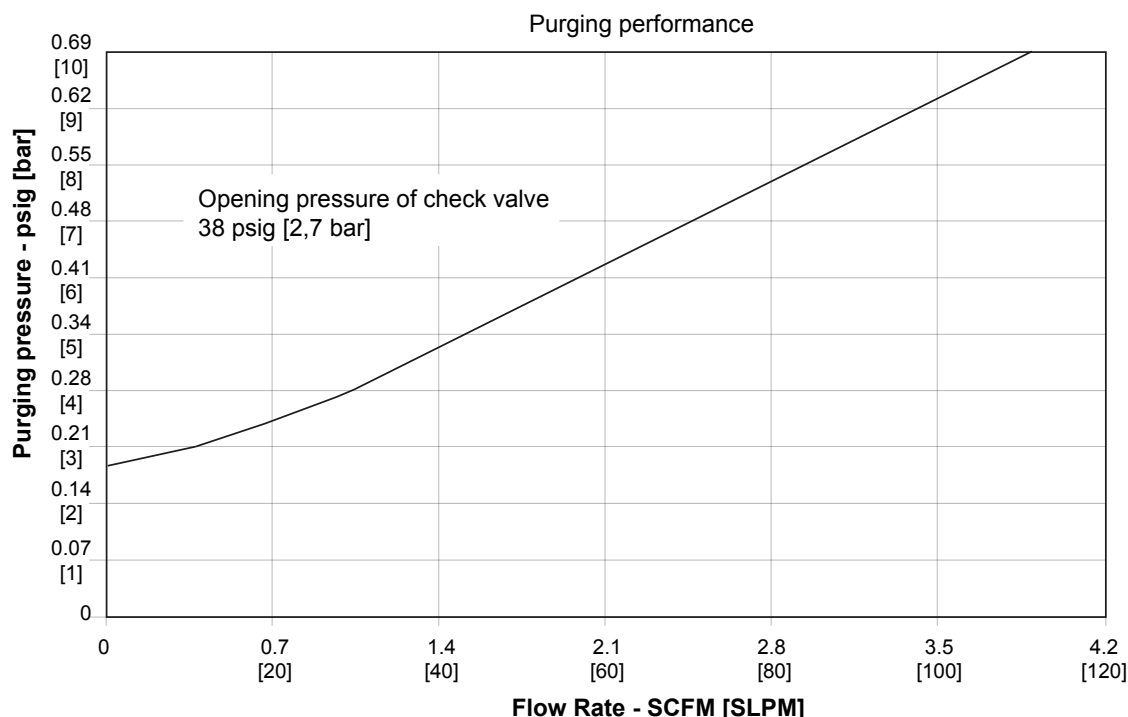


WEGA-SP with integrated Purging Function Flow Charts

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.



WEGA-SP with Integrated Purging Function Flow Charts



WEGA-SP with Integrated Purging Function – 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:

WSP	D	K	20	-	05	-	A	1	R
TYPE	CYLINDER CONNECTION STANDARD	INLET PRESSURE-CONNECTION	GAS		OUTLET CONNECTION	VALVE STEM	OUTLET PRESSURE RANGE BAR [PSIG]	RELIEF VALVE	
WSP	B – BS341 C – CGA V-1 D – DIN 477-1	H – Hand connection with O-Ring-sealing ⁴ K – Hex swivel nut, Stainless Steel, with flat seal	17 – Test gas ¹ 18 – Test gas with Ammonia-, sulfur dioxide- or hydrogen sulfide-content ¹ 19 – Sulfur dioxide ² 20 – Ammonia ^{2,3} 21 – Hydrogen sulfide ² 24 – Chlorine ² 25 – Nitrogen monoxide ¹ 26 – Hydrogen chloride ^{2,3}		00 – 1/4" NPTF female 05 – compression fitting for 6 mm OD tube 08 – compression fitting for 1/4" OD tube 62 – Diaphragm shut-off valve with 6 mm compression fitting and 6 mm hose connector	A – No Positive Seal B – Positive Seal (longer life for corrosive gases)	1– 0.5 - 1.5 [7.25 - 21.75] 2– 0.5 - 4.0 [7.25 - 58.0] 3– 1.0 - 7.0 [14.5 - 101.5] 4– 1.0 - 10.0 [14.5 - 145.0]	R – Relief valve and compression fitting for 6 mm OD tube (mandatory for Gas ID 17 & 18) P – Plug	
	N – none (1/4" NPTF)	N – none (1/4" NPTF)							

¹ Cv = 0.06 ² Cv = 0.15 ³ Positive Seal: Hastelloy® -Stem & diaphragm ⁴ Only available for DIN standard



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.