

44-3200 Series

Regulators - Pressure Reducing

D44321775X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure

500, 3000 psig / 34.5, 207 bar

Outlet Pressure Ranges

0-25, 0-50, 0-100, 0-150, 0-200 psig
0-1.7, 0-3.4, 0-6.9, 0-10.3, 0-13.8 bar

Design Proof Pressure

150% of rated pressure

Leakage

Internal: Bubble-tight

External: $< 2 \times 10^{-8}$ atm cc/sec He

Operating Temperature

-40°F to 140°F / -40°C to 60°C

Flow Capacity

$C_v = 1.0$

$C_v = 1.8$ (Optional)

MEDIA CONTACT MATERIALS

Body

Brass, 316 Stainless Steel

Bonnet

300 Series Stainless Steel

Diaphragm

316 Stainless Steel

Seat

3000 psig / 207 bar Inlet: CTFE

500 psig / 34.5 bar Inlet: Teflon®

Seat Retainer

Nitronic 60

Seal

Teflon®

Remaining Parts

316 Stainless Steel

OTHER

Cleaning

CGA 4.1 and ASTM G93

Weight (without gauges)

3.5 lbs / 1.6 kg

Teflon® is a registered trademark of E.I du Pont de Nemours and Company.



TESCOM 44-3200 Series is a compact, high flow, high purity single-stage regulator for specialty, flammable and industrial gas flows of 5-50 SCFM / 141-1415 SLPM. Diffusion-resistant metal diaphragm seal ensures gas purity and integrity.

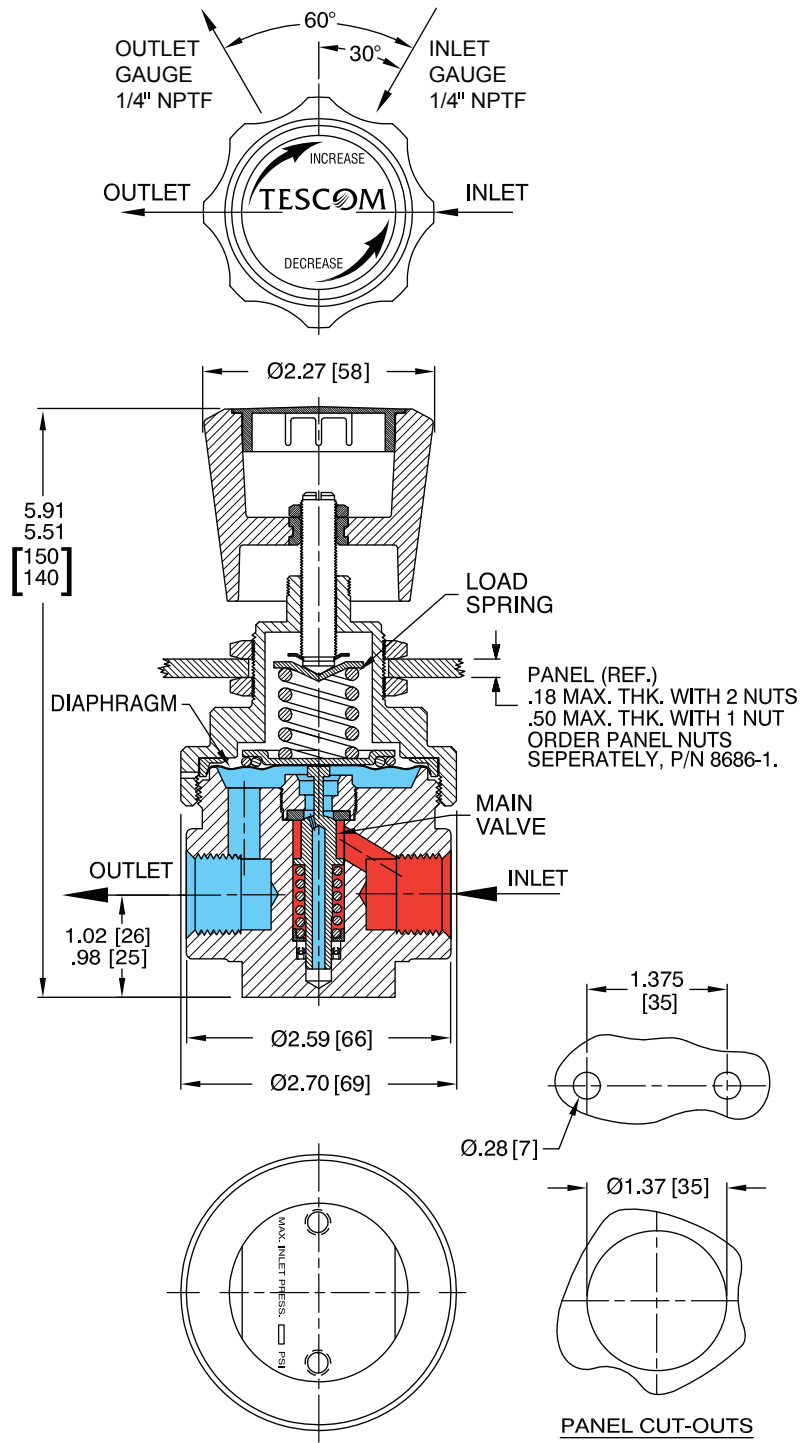
Applications

- Laboratory and point-of-use gas systems
- Laser assist and resonator gases
- Glove box and isolators

Features and Benefits

- Available in 316 Stainless Steel or Brass
- Choice of inlet pressure ratings: 500 or 3000 psig / 34.5 or 207 bar maximum
- True metal-to-metal diaphragm seal to minimize diffusion
- Five outlet pressure ranges are available
- Gauge ports are standard
- Optional high flow model ($C_v = 1.8$) is available
- Panel mounting is optional
- Non-venting is standard

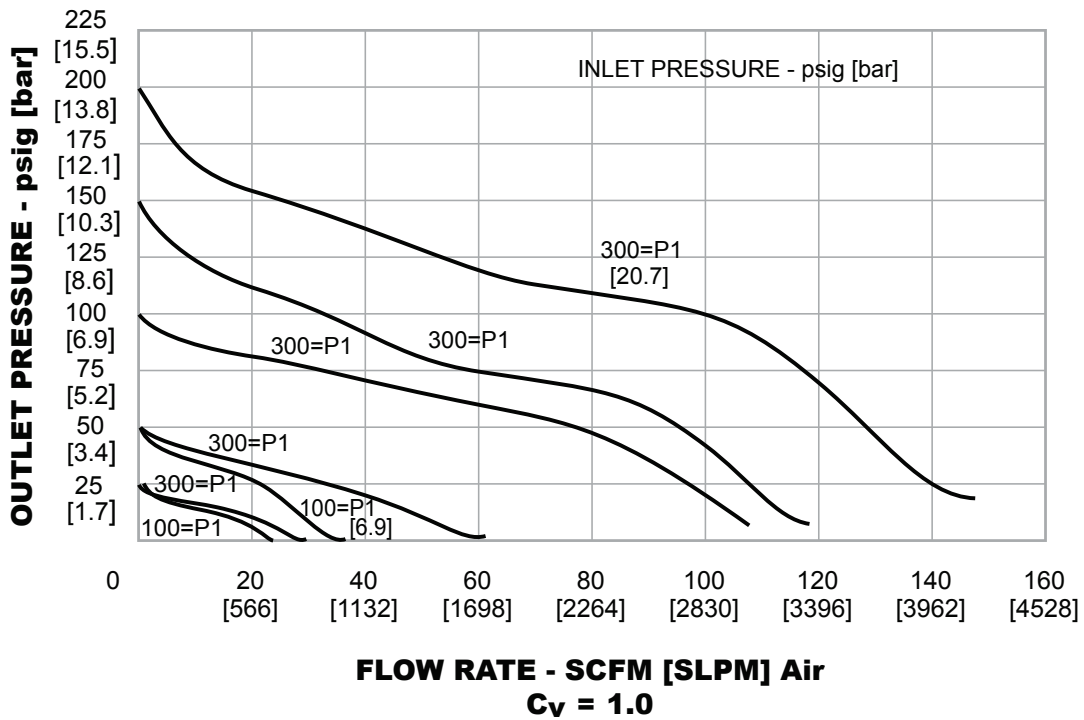
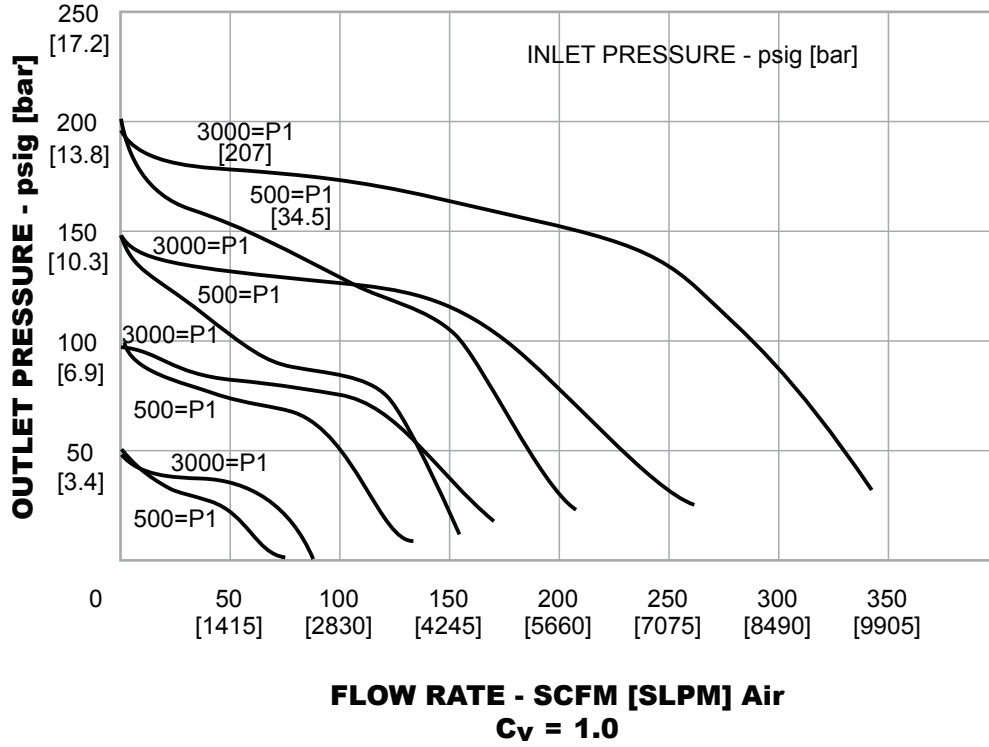
44-3200 Series Regulator Drawing



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

44-3200 Series 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.



44-3200 Series Regulator 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:

BASIC SERIES	BODY MATERIAL	OUTLET PRESSURE RANGES	SOFT GOODS		INLET AND OUTLET PORT TYPE	INLET AND OUTLET PORT SIZE	MAXIMUM INLET PRESSURE	OPTIONS
			SEAT	SEAL				
44-32	1 – Brass 6 – 316 Stainless Steel	0 – 0-25 psig 0-1.7 bar 1 – 0-50 psig 0-3.4 bar 2 – 0-100 psig 0-6.9 bar 3 – 0-150 psig 0-10.3 bar 4 – 0-200 psig 0-13.8 bar	H – Teflon® J – CTFE	Teflon®, O-ring Teflon®, Spring Energized Lip Seal	2 – NPTF	6 – 3/8" 8 – 1/2"	1 – 3000 psig 207 bar 3 – 500 psig 34.5 bar	-001 – One 1/4" gauge port at 90°, C _v = 1.0 -003 – No gauge ports -296 – One 1/4" gauge port at 90°, C _v = 1.8

44-3200F Series

Regulators - Pressure Reducing

D4432FL10101XEN2

Specifications*For other materials or modifications, please consult TESCOM.***FLUID MEDIA**

Corrosive or non-corrosive gases requiring high purity regulation compatible with materials of construction. For other media, consult factory.

OPERATING PARAMETERS*Pressure rating per criteria of ANSI/ASME B31.3***Maximum Inlet Pressure**

580 psig / 40.0 bar

Outlet Pressure Ranges

28" Hg VAC-15 psig / 65 mbar abs-1.0 bar
 28" Hg VAC-30 psig / 65 mbar abs-2.1 bar
 28" Hg VAC-60 psig / 65 mbar abs-4.1 bar
 28" Hg VAC-100 psig / 65 mbar abs-6.9 bar
 0-25 psig / 0-1.7 bar
 0-50 psig / 0-3.4 bar
 0-100 psig / 0-6.9 bar
 0-150 psig / 0-10.3 bar
 0-200 psig / 0-13.8 bar

Design Proof Pressure

150% of rated pressure

Design Burst Pressure

400% of rated pressure

Leakage**Internal:** Bubble-tight**External:** $< 2 \times 10^{-8}$ atm cc/sec He (mbar l/s He)**Flow Capacity** $C_v = 1.0$ $C_v = 1.8$ **Operating Temperature**

-15°F to 165°F / -26°C to 74°C

MEDIA CONTACT MATERIALS**Body**

316L Stainless Steel

Seal

Teflon®

Seat

Teflon®

Diaphragm

316L Stainless Steel or Hastelloy®

Remaining Parts

316 Stainless Steel, Nitronic 60

OTHER**Weight (approximate)****DN 10/15:** 6.6 lbs / 3.0 kg**DN 20/25:** 12 lbs / 5.4 kg

*Teflon® is a registered trademark of E.I. du Pont de Nemours and Company.
 Hastelloy® is a registered trademark of Haynes International, Inc.*



TESCOM 44-3200F Series medium flow, pressure reducing regulators provide welded flanges according to EN 1092 and are suitable for gas applications.

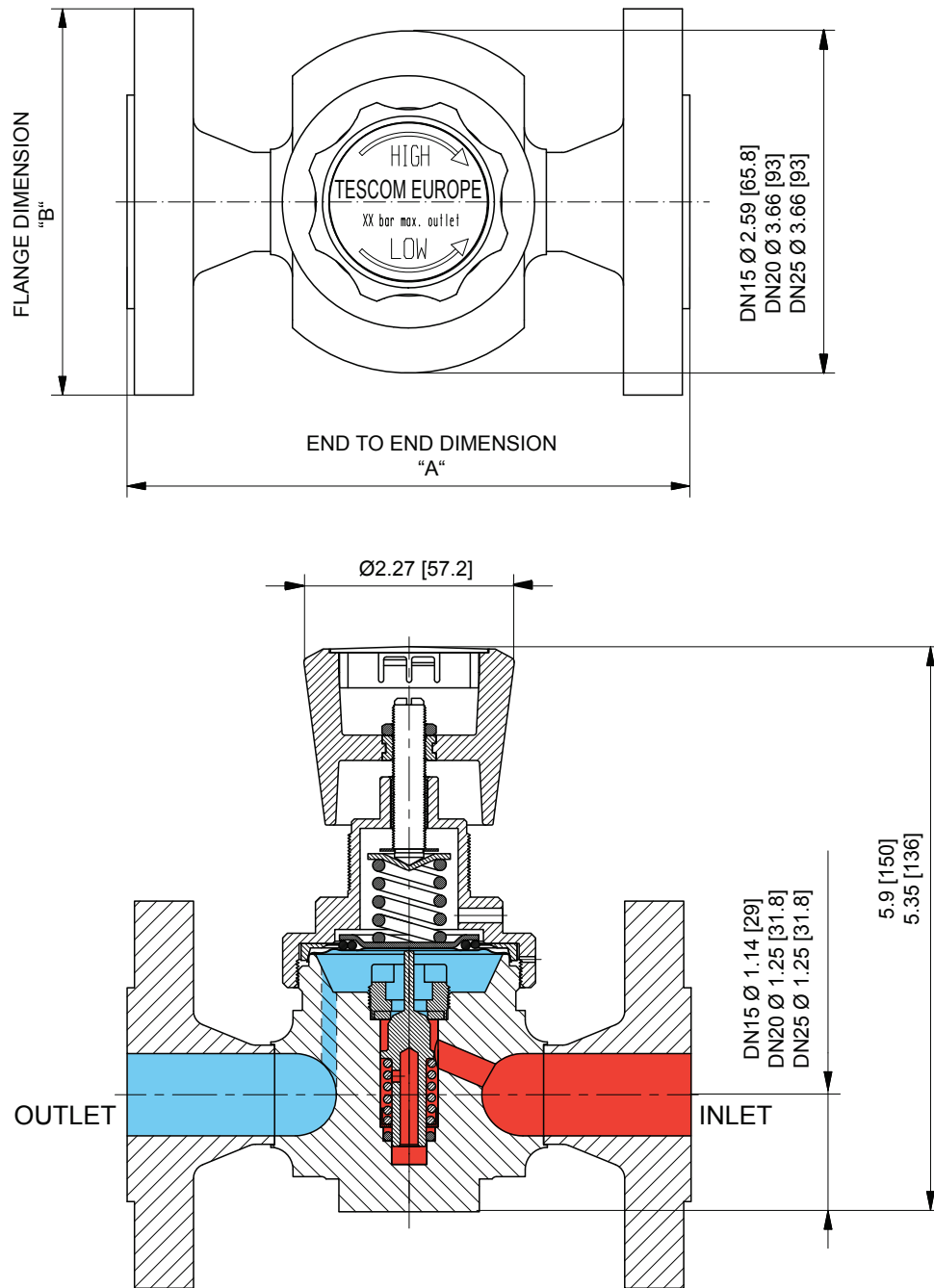
Applications

- Purge processes (e.g. nitrogen)
- First-stage regulator for nitrogen blanketing applications

Features and Benefits

- Flange connections according to DIN EN 1092-1 Type 11 for easy line integration
- Face-to-face dimensions according to DIN EN 558, Row 1
- Connection up to DN 25
- High purity materials and design
- Other connection standards are available upon request
- Standard version includes 1/4" NPTF gauge ports

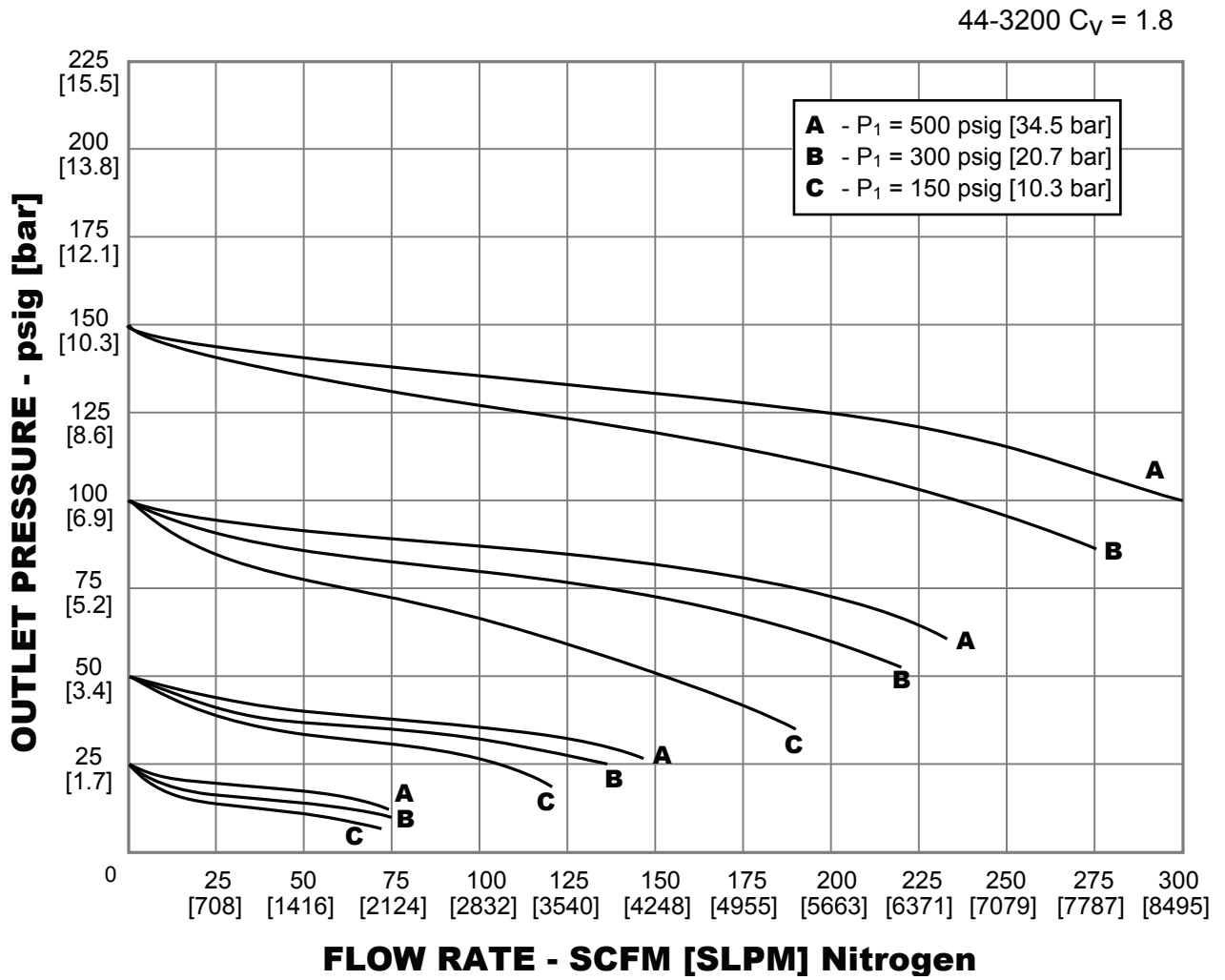
44-3200F Series Regulator Drawing



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44-3200F Series Regulator 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.



44-3200F Series Regulator 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:

44-32		6	1	F	K	B	F	2	N	E
BASIC SERIES	BODY AND FLANGE MATERIAL	OUTLET PRESSURE	INLET AND OUTLET PORT TYPE	"A" ±.08" [±2]	"B" ±.08" [±2]	FLANGE TYPE	GAUGE PORT OPTIONS	FLOW CAPACITY	VENTING OPTION	
44-32	6 – 316L diaphragm: Stainless Steel ¹	A – 28" Hg VAC-15 psig 65 mbar abs-1.0 bar ¹	G – DN 10	5.12 [130]	3.54 [90]	B – Form B - raised face	A – None 	2 – C _v = 1.8 3 – C _v = 1.0 ¹	N – Non-Venting	
	7 – 316L diaphragm: Hastelloy®	B – 28" Hg VAC-30 psig 65 mbar abs-2.1 bar ¹	K – DN 15	5.12 [130]	3.74 [95]	D – Form D - ring joint	D – 1/4" NPTF 1 x out 			
		C – 28" Hg VAC-60 psig 65 mbar abs-4.1 bar ¹	L – DN 20	5.9 [150]	4.13 [105]		E – 1/4" NPTF 1 x out 			
		D – 28" Hg VAC-100 psig 65 mbar abs-6.9 bar ¹	M – DN 25	6.3 [160]	4.53 [115]		F – 1/4" NPTF 1 x in 			
		0 – 0-25 psig 0-1.7 bar					L – 1/4" NPTF 1 x in, 1 x out 			
		1 – 0-50 psig 0-3.4 bar								
		2 – 0-100 psig 0-6.9 bar								
		3 – 0-150 psig 0-10.3 bar								
		4 – 0-200 psig 0-13.8 bar								

¹. C_v = 1.0 and diaphragm material 316L Stainless Steel are not available for 44-326A, B, C, D