

## Specifications

For other materials or modifications, please consult TESCOM.

### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

#### Maximum Inlet Pressure

600 or 3500 psig / 41.4 or 241 bar

#### Outlet Pressure Ranges

0-30, 0-60, 0-100, 0-150 and 250 psig  
0-2.1, 0-4.1, 0-6.9, 0-10.3 and 17.2 bar

#### Design Proof Pressure

150% of maximum rated

#### Inboard Leak Rate

$1 \times 10^{-9}$  atm cc/sec He

#### Operating Temperature

**PTCFE Seat:** -40°F to 140°F / -40°C to 60°C  
**Teflon® Seat:** -40°F to 160°F / -40°C to 71°C  
**VespeI® Seat:** -40°F to 350°F / -40°C to 177°C

#### Flow Capacity

$C_v = 0.06$  (3500 psig / 241 bar model)  
 $C_v = 0.15$  (600 psig / 41.4 bar model)

### MEDIA CONTACT MATERIALS

#### Body

316L Stainless Steel Electropolish or  
316L VAR Stainless Steel Electropolish

#### Diaphragm

316L Stainless Steel or Nickel Alloy (Hastelloy®)\*

#### Seat

PCTFE or PTFE (Polyimide (VespeI®) optional for 3500 psig / 241 bar model only)

#### Spring

316 Stainless Steel or Cobalt Chrome Nickel Alloy (Elgiloy®)

#### Stem, Seat Retainer, Valve Guide

316 Stainless Steel or Nickel Alloy (Hastelloy®)\*

### OTHER

#### Internal Surface Finish

10  $R_a$  microinch / 0.25 micrometer

#### Connections

Welded female or male VCR®  
Tube stubs  
High Purity Internal Connections (H.P.I.C.)  
(Internal style of VCR®, compatible with male swivel VCR®)

#### Cleaning

DI water electronic grade cleaned and ES 500 Particle Certified for internal electropolish models

#### Internal Volume

1/4" fitting / 5.75 cc

#### Weight (without gauges)

2 lbs / 0.9 kg

Teflon® and VespeI® are registered trademarks of E.I. du Pont de Nemours and Company.

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

Elgiloy® is a registered trademark of Elgiloy Corp.

VCR® is a registered trademark of Cajon Co.

\*Material to be Hastelloy® or equivalent per ASTM B 574



TESCOM 64-2600 Series economical high purity pressure reducing regulator provides Stainless Steel construction with 10  $R_a$  surface finish and is electronic grade cleaned. Inlet pressures are 600 or 3500 psig / 41.4 or 241 bar with outlet pressures of up to 250 psig / 17.2 bar.

### Applications

- 1/4" point-of-use
- Gas cabinets
- Semiconductor manufacturing
- Valve manifold boxes
- Research labs

### Features and Benefits

- Optimum performance and cleanliness at a great value
- Internal surface finished to 10  $R_a$  microinch / 0.25 micrometer ensures minimal particle generation or entrapment
- True metal-to-metal body diaphragm seal provides enhanced leak integrity
- No bias spring or friction device in the flow stream
- Adjustable stop to limit outlet pressure
- Positionable ported bonnet ring is available

#### NOTE:

When choosing a regulator and control pressure, decaying inlet characteristic must be considered when the supply pressure is expected to change. The decaying inlet characteristic of a pressure reducing regulator is commonly known as the increase in control pressure due to the decrease in supply pressure. It is important to make sure this effect does not cause the control pressure to exceed the pressure rating of the unit's outlet or that of the downstream system.

For more information on decaying inlet, please refer to the Technical Information section of the product catalog and/or contact the TESCOM customer support further assistance.

# 64-2600 SERIES

## 64-2600 Series Regulator Drawing

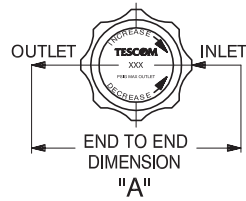
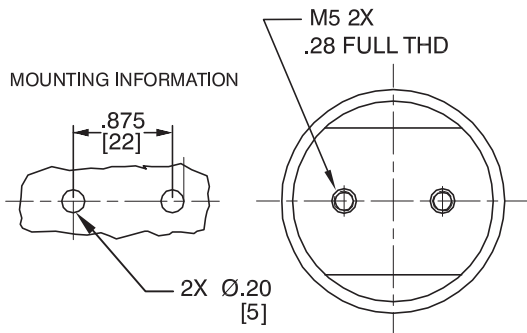
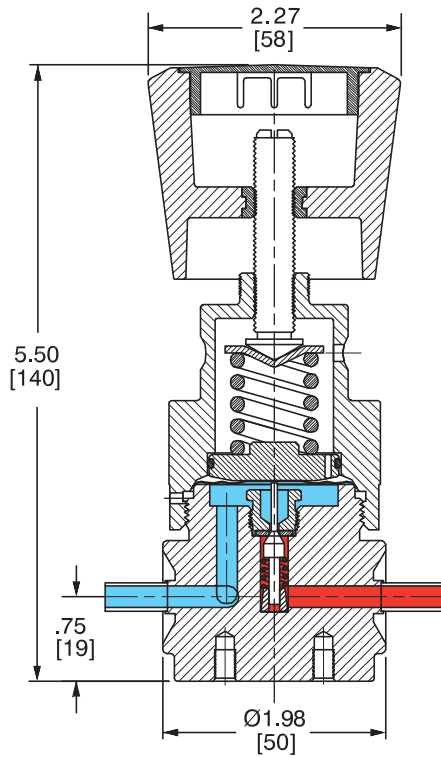


Figure A  
(no gauges)

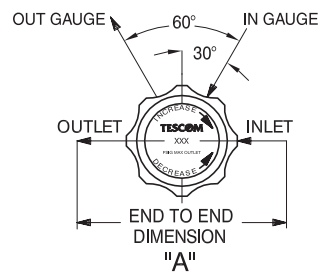


Figure B  
(2 gauges)

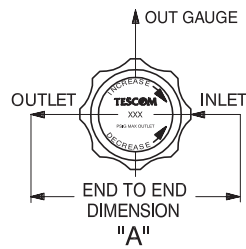


Figure C  
(1 gauge)

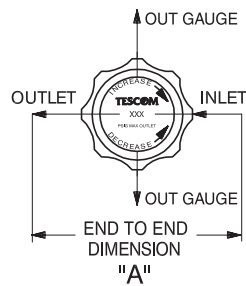
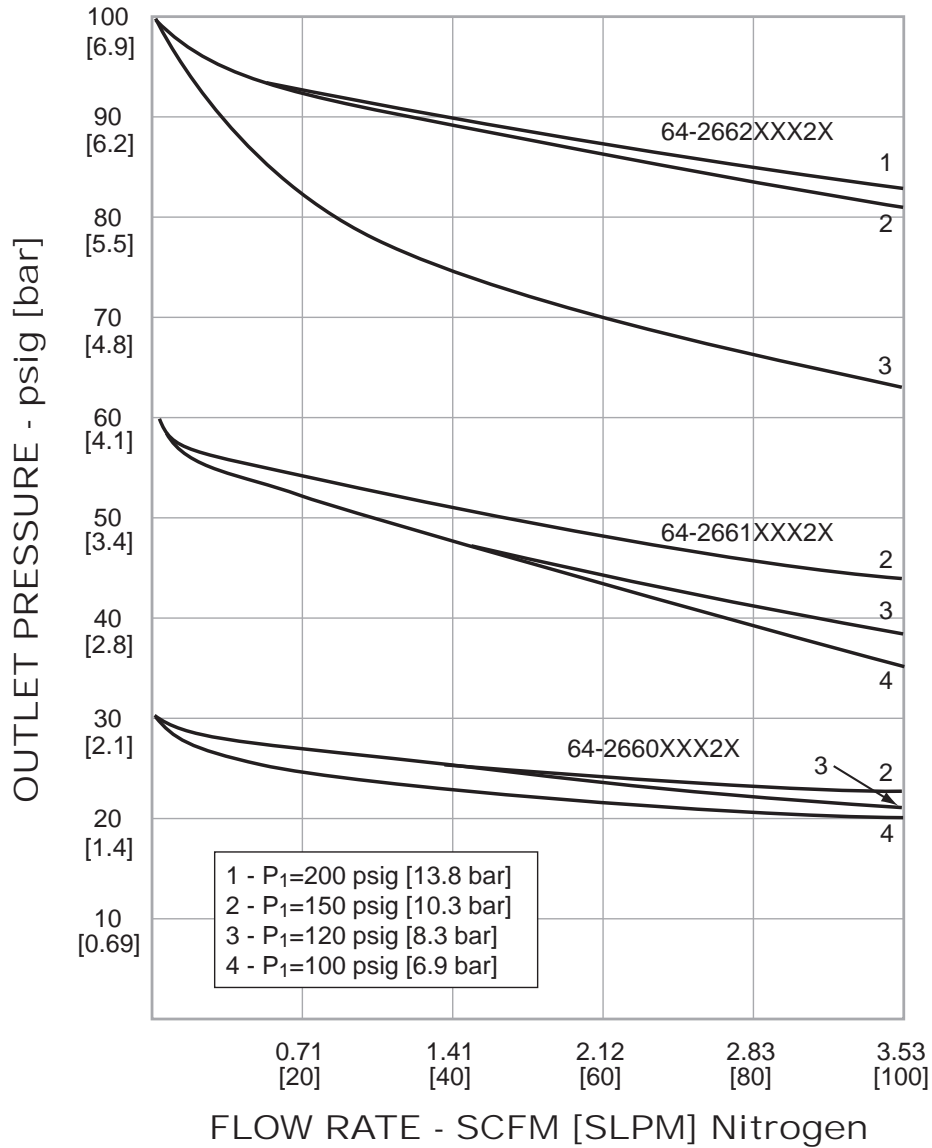


Figure D  
(2 out gauges)

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

64-2600 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 TESCO catalog or on www.tescom.com.



# 64-2600 SERIES

## 64-2600 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:

64-26	4	2	K	A4		1	0	
BASIC SERIES	BODY MATERIAL/ FINISH	OUTLET PRESSURE RANGES	SEAT MATERIAL	INLET AND OUTLET PORT SIZE AND TYPE	'A' ± .06"	MAXIMUM INLET	GAUGE PORT OPTION	NO. OF GAUGE PORTS (SEE FIGURE)
64-26	4 – 316L Stainless Steel Electropolish: 10 R <sub>a</sub> <sup>1</sup>	0 – 0-30 psig 0-2.1 bar	K – PCTFE	A4 – 1/4" H.P.I.C.	-	1 – 3500 psig 241 bar	0 – None	0 (Figure A)
	6 – 316L VAR Stainless Steel Electropolish: 10 R <sub>a</sub> <sup>2</sup>	1 – 0-60 psig 0-4.1 bar	T – PTFE	RK – 1/2" Male Swivel	4.75"	316 Stainless Steel Trim	1 – 1/4" H.P.I.C.	1 (Figure C)
		2 – 0-100 psig 0-6.9 bar	V – Polyimide (Vespe <sup>l</sup> ) (3500 psig / 241 bar model only)	RL – 1/2" Female Swivel	4.75"	2 – 600 psig 41.4 bar	2 – 1/4" H.P.I.C.	2 (Figure B)
		3 – 0-250 psig 0-17.2 bar		RM – 1/4" Male Swivel	3.70"	316 Stainless Steel Trim	3 – 1/4" H.P.I.C.	2 (Figure D)
		6 – 0-150 psig 0-10.3 bar		RT – 1/4" Female Swivel	3.70"	2 – 600 psig 41.4 bar	4 – 1/4" Male Swivel	2 (Figure D)
				RU – IN Port: 1/4" Male; OUT Port: 1/4" Female	3.70"	316 Stainless Steel Trim	5 – 1/4" Male Swivel	1 (Figure C)
				RV – IN Port: 1/4" Female; OUT Port: 1/4" Male	3.70"	3 – 3500 psig 241 bar	6 – 1/4" Male Swivel	2 (Figure B)
				T4 – 1/4" Tube Stubs	3.00"	Hastelloy <sup>®</sup> Trim	7 – 1/4" Female Swivel	2 (Figure D)
						4 – 600 psig 41.4 bar	8 – 1/4" Female Swivel	1 (Figure C)
						Hastelloy <sup>®</sup> Trim	9 – 1/4" Female Swivel	2 (Figure B)
							S – 1/4" Fixed Male	2 (Figure B)
							T – 1/4" Fixed Male	1 (Figure C)
							U – 1/4" Fixed Male	2 (Figure D)

1. Per ASTM B 912  
2. Per SEMI F19, HP grade