

SMTR Series

Surface Mount Tool Regulator

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

Customer Value Proposition:

The Surface Mount Tool Regulator is offered in two flow ranges, the SMTR and the SMTRHF (High Flow). The SMTR and SMTRHF 1-1/8" tool regulators are part of the process proven QRM product line which provides excellent stability and sensitivity for today's modular surface mount systems.

They provide all of the performance benefits to modular designs, including a threadless seat, non-tied diaphragm design, extraordinary transient response performance and low particle counts.

Contact Information:

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Product Features:

- Meets SEMI Modular Interface Specifications.
- Standard Hastelloy C-22® diaphragm for high corrosion resistance.
- Critically dampened to improve MFC stability.
- No threads exposed to the wetted area.
- Miniature footprint with low internal volume.
- Standard full internal electropolish.



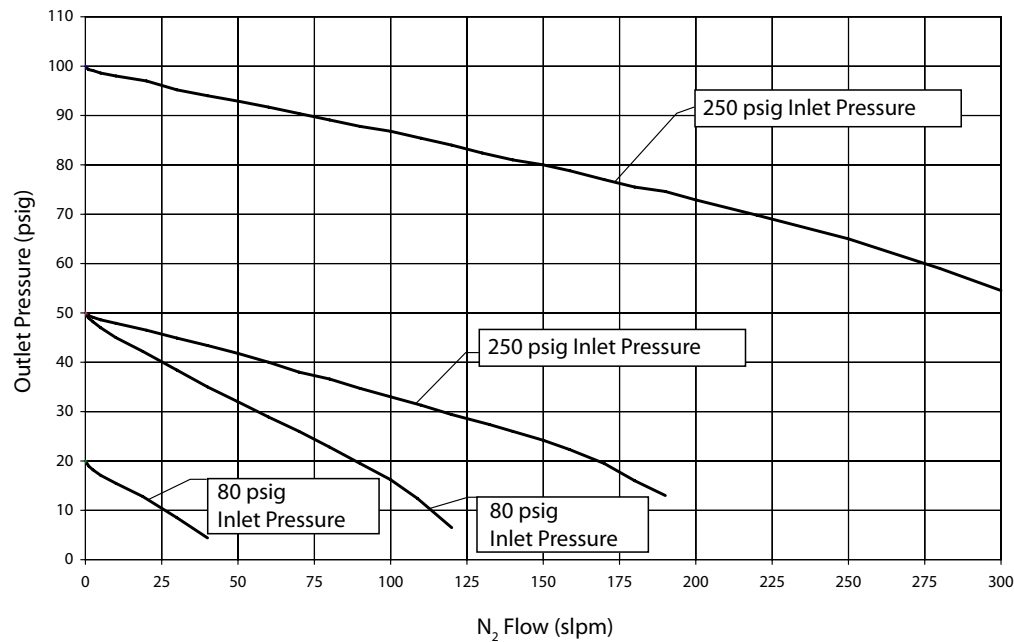
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SMTR & SMTRHF Series

Flow Curves

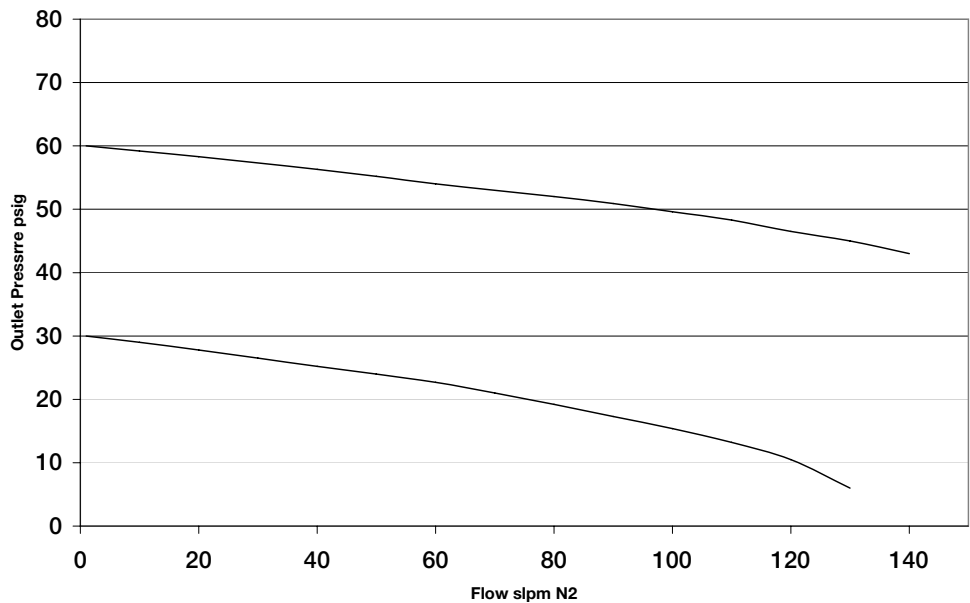
Additional flow curves available upon request

SMTR



SMTRHF

100 psig Inlet Pressure



Safety Guide and Installation and Operating Instructions available at
www.parker.com/veriflo

SMTR & SMTRHF Series

Ordering Information

Build a SMTR or SMTRHF Series regulator by replacing the numbered symbols with an option from the corresponding tables below.

Sample: **SMTRHF** **30** **S** **10** **PA**
 Finished Order: **SMTRHF30S10PA**

1 Basic Series
 SMTR
 SMTRHF

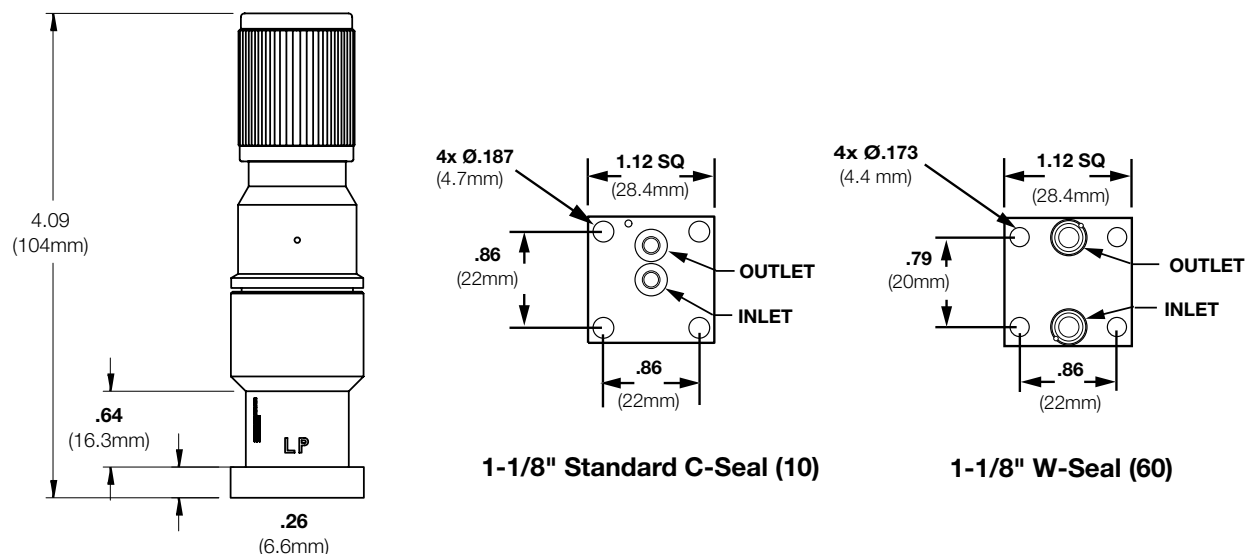
2 Pressure Range
SMTR
 30 = -10 - 30 psig
 60 = 2 - 60 psig
 100 = 3 - 100 psig
SMTRHF
 30 = 1 - 30 psig
 60 = 2 - 60 psig

3 Body Material
 S = 316L VeriClean™ Stainless Steel

4 Porting
 10 = 2 Ports C-Seal
 60 = 2 Port W-Seal

5 Optional Features
 This section can have multiple options
 PA = MPa Max Inlet Pressure Unit Marking
 EV = 5 Ra Surface Finish

Dimensional Drawing



SMTR & SMTRHF Series

Specifications

Materials of Construction	
Wetted	
Body	VeriClean™ 316L Stainless Steel
Compression Member	VeriClean™ 316L Stainless Steel
Diaphragm	Hastelloy C-22®
Poppet	Hastelloy C-276® - SMTRHF Only
Poppet Ball	Inconel X-750® - SMTR Only
Poppet Pin	Hastelloy C-22®
Poppet Spring	Inconel X-750®
Seat	PCTFE
Seat Spacer	VeriClean™ 316L Stainless Steel
Non-wetted	
Cap	17-4 PH
Adjusting Screw	316L Stainless Steel
Knob (Black)	ABS
Operating Conditions	
Maximum Inlet	250 psig
Outlet	
SMTR	-10 psig - 30 psig (5 psia, 250 torr - 2 barg) 2 - 60 psig (0.14 - 4 barg) 3 - 100 psig (0.2 - 7 barg)
SMTRHF	1 - 30 psig (0.07 - 2 barg) 2 - 60 psig (0.14 - 4 barg)
Temperature	
Operating	-40°F to 150°F (-40°C to 66°C)
Storage	-40°F to 150°F (-40°C to 66°C)

Functional Performance	
Design	
Burst Pressure	750 psig (52 barg)
Proof Pressure	375 psig (26 barg)
Flow Capacity	C _v 0.08 - SMTR Only
	C _v 0.13 - SMTRHF Only
Leak Rate	
Internal	Inboard Test Method
External	<4 x 10 ⁻⁸ cc/sec He
	<2 x 10 ⁻¹⁰ cc/sec He
Supply Pressure Effect	0.88 psig / 100 psig (0.06 barg / 7 barg) - SMTR Only
	6.3 psig / 100 psig (0.43 barg / 7 barg) - SMTRHF Only
Surface Finish	
Standard Ra	10 micro inch
Optional Ra	5 micro inch
Internal Volume	1.75 cc
Approx. Weight	0.6 lbs (0.3 kg)

Hastelloy C-22® is a registered trademark of Haynes International, Inc.
VeriClean™ is a trademark of Parker Hannifin Corporation
Inconel® is a registered trademark of Special Metals Corporation

For additional information on materials of construction, functional performance and operating conditions, please contact factory.

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