

QRM & QRMHF Series

Miniature Pressure Regulator

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

Customer Value Proposition:

Parker Hannifin Corporation's Veriflo Division presents the QRM and QRMHF pressure regulators. The QRM and QRMHF are miniature, high purity, threadless type, non-tied diaphragm regulators with a footprint designed to reduce system real estate.

The design of the QRM and QRMHF provides faster purge times and extends the seat life. They provide precise gas regulation and performance in a miniature regulator.



Contact Information:

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Product Features:

- Standard Hastelloy C-22® diaphragm.
- Miniature footprint with low internal volume.
- Dimensions are interchangeable with Veriflo Quantum valves.
- No threads exposed to the wetted area.
- Standard full internal electropolish.
- Critically Dampened to improve MFC Flow Stability.



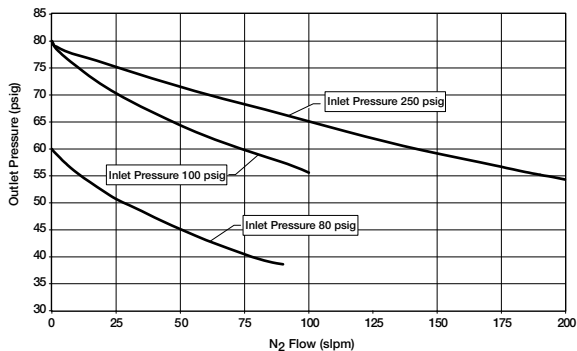
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QRM & QRMHF Series

Flow Curves

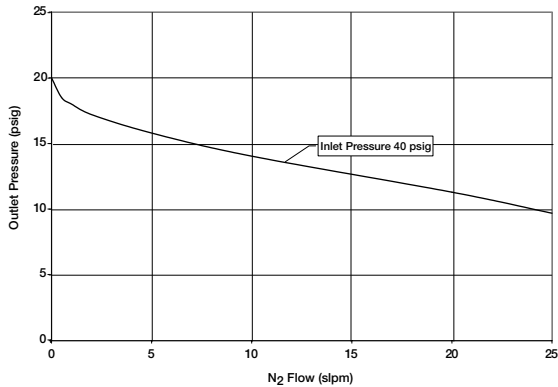
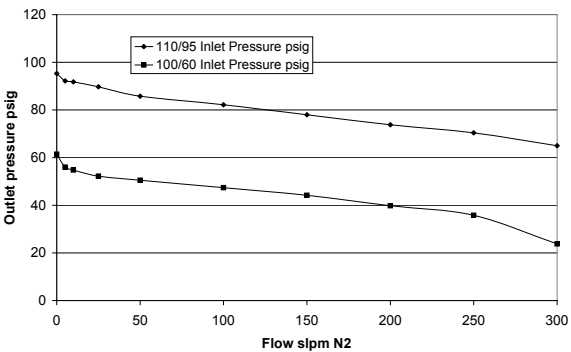
Additional flow curves available upon request

QRM

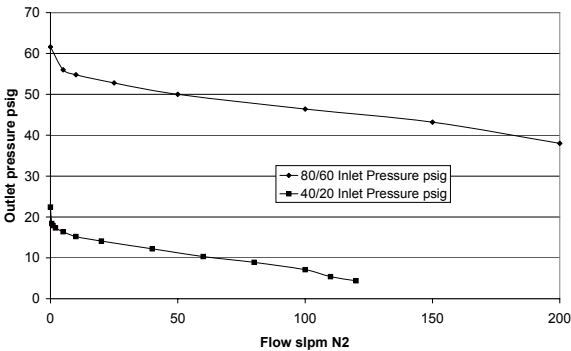


QRMHF

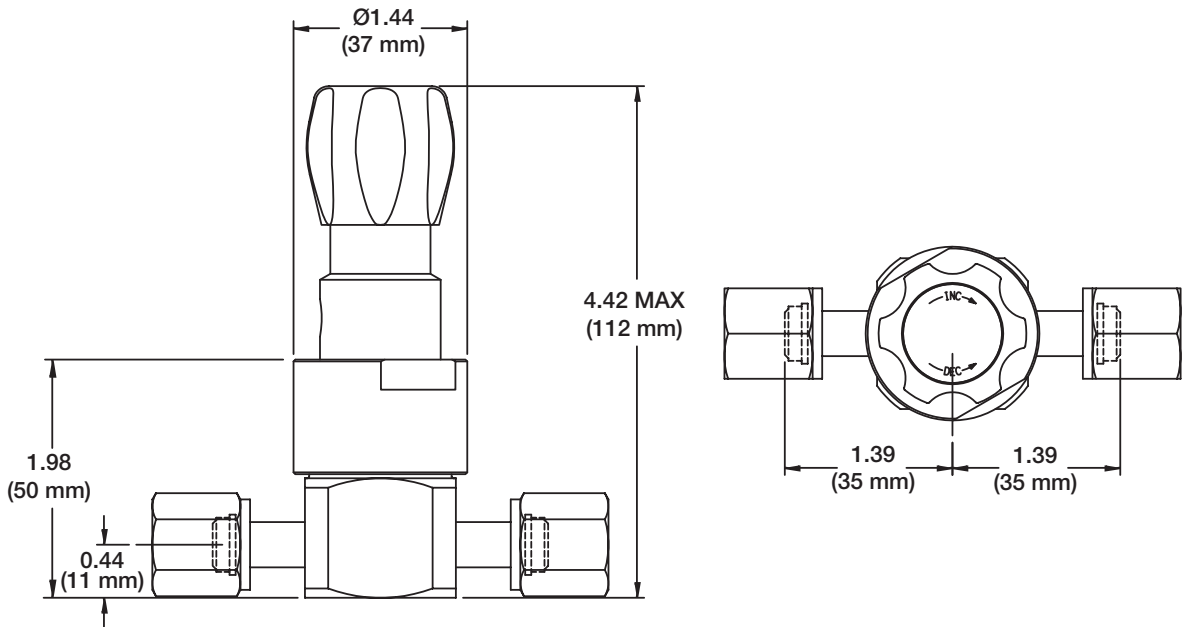
QRM HF Flow Curve



QRM HF Flow Curve



Dimensional Drawing



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

QRM & QRMHF Series

Ordering Information

Build a QRM & QRMHF Series regulator by replacing the numbered symbols with an option from the corresponding tables below.

1

2

3

4

5

6

7

8

Sample: **QRMHF 30 S 2P FS MF**

Finished Order: **QRMHF30S2PFSMF**

1

Basic Series

QRM

QRMHF

2

Pressure Setting

QRM

30 = -10 - 30 psig

60 = 1 - 60 psig

100 = 2 - 100 psig

250 = 3 - 250 psig

QRMHF

30 = 1 - 30 psig

60 = 1 - 60 psig

100 = 2 - 100 psig

150 = 3 - 150 psig

3

Body Material

S = 316L Stainless Steel

4

Porting

2P = 2 Ports *No X required for gauges, inlet & outlet ports only*

3P = 3 Ports *One X for gauge port*

See Regulator Porting Guide for additional options and port layouts

5

Outlet Gauge *Omit if 2 port*

V3 = -30 - 0 - 30 psig *- QRM only.*

03 = 0 - 30 psig

OL= 0 - 60 psig

01 = 0 - 100 psig

2 = 0 - 200 psig

4 = 0 - 400 psig

X = No Gauge

Additional ranges available upon request

6

Port Style

FS = 1/4" Face Seal

TS = 1/4" Tube Stub

7

Port Configuration

M = Male

F = Female

1/4" FS-M Gauge Ports are Standard

8

Optional Features

This section can have multiple options

PA = MPa Max Inlet Pressure Unit Marking

EV = 5Ra Surface Finish

QRM & QRMHF Series

Specifications

Materials of Construction	
Wetted	
Body	VeriClean™ 316L Stainless Steel
Compression Member	VeriClean™ 316L Stainless Steel
Diaphragm	Hastelloy C-22® or equivalent
Poppet	Inconel X-750® or equivalent - <i>QRM Only</i>
	Hastelloy C-276® or equivalent - <i>QRMHF Only</i>
Poppet Spring	Inconel X-750®
Poppet Pin	Hastelloy C-22® or equivalent
Seat Retainer	VeriClean™ 316L Stainless Steel
Seat	PCTFE
Non-wetted	
Cap	Nickel Plated Brass
Adjusting Screw	316L Stainless Steel
Knob	ABS (Black)
Operating Conditions	
Maximum Inlet	
QRM	500 psig (35 barg)
QRMHF30	250 psig (17 barg)
QRMHF60, QRMHF100, QRMHF150	500 psig (35 barg)

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.

Operating Conditions <i>Continued</i>	
Outlet	
QRM	-10 psig - 30 psig (5 psia, 250 torr - 2 barg)
	1 - 60 psig (0.07 - 4 barg)
	2 - 100 psig (0.14 - 7 barg)
	3 - 250 psig (0.21 - 17 barg)
QRMHF	1 - 30 psig (0.07 - 2 barg)
	1 - 60 psig (0.07 - 4 barg)
	2 - 100 psig (0.14 - 7 barg)
	3 - 150 psig (0.21 - 10.5 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	1500 psig (104 barg)
Proof Pressure	750 psig (52 barg)
Flow Capacity	C _v 0.1 - <i>QRM Only</i>
	C _v 0.17 - <i>QRMHF Only</i>
Leak Rate	
(Inboard Test Method)	
Internal	< 4 x 10 ⁻⁸ cc/sec He
External	< 2 x 10 ⁻¹⁰ cc/sec He
Surface Finish	
Standard Ra	10 micro inch
Optional Ra	5 micro inch
Internal Volume	
4 cc (approximately)	
Approx. Weight	
1 lbs (0.45 kgm)	

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