

IR6000W Series

316L SS, Two Stage, General Purpose Internally Threadless, Welded Regulator



Customer Value Proposition:

The IR6000W Series regulator offers high pressure capability with an inlet pressure up to 4,000 psig. The large convoluted Hastelloy C-22[®] diaphragm provides stable pressure control over the operational range of the regulator.

Close tolerances and tight alignment of moving components minimize hysteresis and improve cycle life. Convoluted, Hastelloy C-22[®] diaphragm provides high corrosion resistance and increases cycle life.



Contact Information:

Parker Hannifin Corporation
Veriflo Division
250 Canal Blvd
Richmond, California 94804

phone 510 235 9590
fax 510 232 7396
veriflo.sales@parker.com

www.parker.com/veriflo

Product Features:

- Unique compression member loads the seal to the body without requiring a threaded nozzle or additional seals.
- Internally threadless design reduces particle generation. The low internal volume reduces purge times.
- Cleaned for O₂ service is standard.
- Positive upward and downward stops increase cycle life by preventing over stroking of the diaphragm.
- Captured bonnet allows for safety venting
- Selection of seat materials for media compatibility and temperature applications.

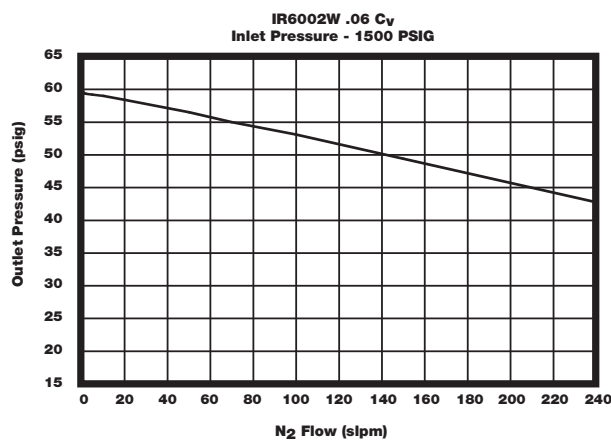
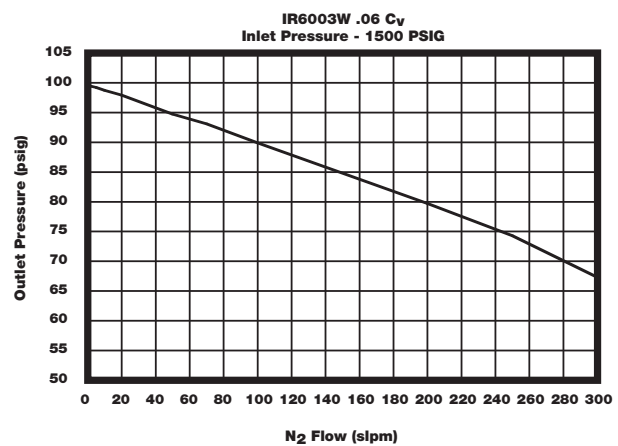
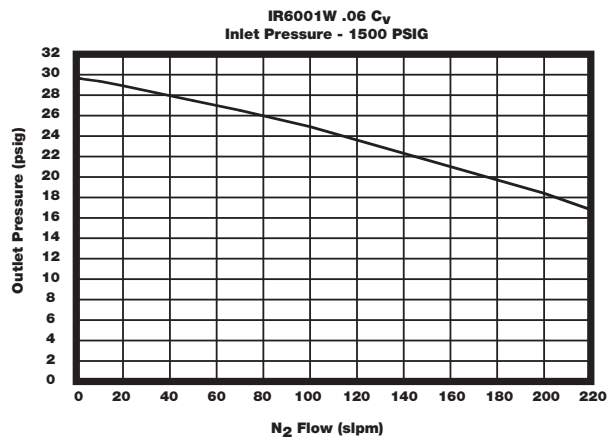


ENGINEERING YOUR SUCCESS.

IR6000W SERIES

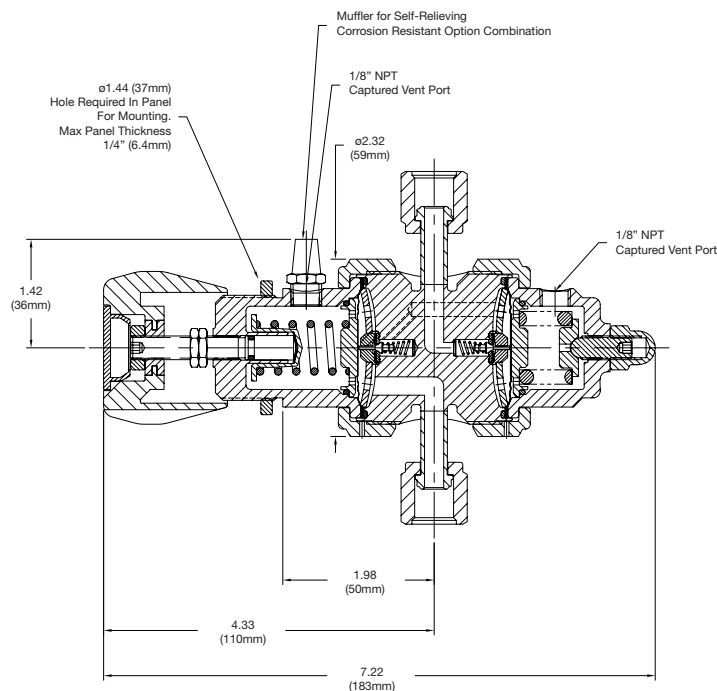
Flow Curves

Additional flow curves available upon request



Basic Model	RANGE TABLE		
	Max Inlet PSIG		
	0.06 C _v	0.02 C _v	0.15 C _v
IR6000W	4000	4000	1250
IR6001W	4000	4000	1250
IR6002W	4000	4000	1250
IR6003W	4000	4000	1250
IR6004W	4000	4000	1250
IR6015W	4000	4000	1250

Dimensional Drawing



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

IR6000W SERIES

Ordering Information

Build an IR6000W Series regulator by replacing the numbered symbols with an option from the corresponding tables below.

1
2
3
4
5
6
7
8
9
10
11
12

Sample: **IR60 01 W K 3P X FS MMM B L**

Finished Order: **IR6001WK3PXFMMMBL**

1 Basic Series

Range	Outlet Gauge
00 = 0 - 10 psig	0 - 30 psig
01 = 1 - 30 psig	0 - 60 psig
02 = 2 - 60 psig	0 - 100 psig
03 = 3 - 100 psig	0 - 200 psig
15 = 5 - 150 psig	0 - 200 psig
04 = 10 - 250 psig	0 - 400 psig

2 Body Material

W = 316L Stainless Steel

3 Flow Capacity

= 0.06 Cv *Standard*
 1 = 0.02 Cv
 2 = 0.15 Cv

4 Seat Material

K = PCTFE
 P = PEEK™
 V = Vespel®

5 Porting

2P = 2 Ports *No X required for gauges, inlet & outlet ports only*
 3P = 3 Ports *One X for gauge port*
 4P = 4 Ports *Two X's for gauge ports*
 4PB = 4 Ports *One X for gauge port*
 5P = 5 Ports *Two X's for gauge ports*

See Regulator Porting Guide for more information

6 Outlet Gauge

Outlet Gauge	Basic Series
03 = 0 - 30 psig	IR6000W
OL = 0 - 60 psig	IR6001W
01 = 0 - 100 psig	IR6002W
2 = 0 - 200 psig	IR6003W
4 = 0 - 400 psig	IR6004W
X = No Gauge	

Additional ranges available upon request

7 Inlet Gauge

X = No Gauge
 30 = 3000 psig (Standard)
 20 = 2000 psig with the 0.15 Cv option
 40 = 4000 psig

Additional ranges available upon request

8 Port Style

4T = 1/4" A-LOK®
 6T = 3/8" A-LOK®
 8T = 1/2" A-LOK®
 FS = 1/4" Face Seal
 FS8 = 1/2" Face Seal
 TS = 1/4" Tube Stub
 TS6 = 3/8" Tube Stub
 TS8 = 1/2" Tube Stub

9 Port Style

M = Male
 F = Female
 I = Internal
*1/4" FSM Gauge Ports are standard.
 1/4" NPT Ports are standard for compression ends.*

10 Port Mounting

B = Standard *No other options*

11 Optional Features

This section can have multiple options

C = Corrosion Resistant External *Stainless Steel Cap*
 D = Dome Loaded *Not available with G or M options*
 G = Tamper Proof *Not available with D or M options*
 L = PTFE Backup O-Ring *PCTFE and PEEK™ Seats Only*
 M = Metal Knob *Not available with D or G options*
 R2 = Relief Valve *4PB, 5P and 6P Only*
 S = Self Relieving *Temperature rating -40°F to 150°F (-40°C to 66°C)*
 T = Hastelloy Trim *Includes carrier and back-up washer*

Vent Muffler is standard for the Self-Relieving(S) Corrosion Resistant(C) option combination.

Note: Panel Mount Option:
Order Panel Nut Ring p/n: 41900363 as a separate line item.

Vent Muffler Option:
Order Vent Muffler p/n: 46600581 as a separate line item.

12 **Industrial CGA#**
 320, 330, 350, 510, 580, 590 or 660

DISS CGA#
 634, 716, 718, 724, or 728
Do not exceed the rated pressure of the CGA connection.

IR6000W Series

Specifications

Materials of Construction		Functional Performance	
Wetted		Design	
Body	316L Stainless Steel	Burst Pressure	12,000 psig (828 barg)
Compression Member	Inconel 625®	Proof Pressure	6,000 psig (414 barg)
Diaphragm	Hastelloy C-22®	Flow Capacity	
Poppet	Hastelloy C-276®	C _V Options	C _V 0.06 (std), C _V 0.02, C _V 0.15
Poppet Spring	Inconel X-750®	Leak Rate	
Seat Options	PCTFE (std), Vespel® or PEEK™	Internal	≤ 4 X 10 ⁻⁸ cc/sec He
Carrier Options	316L Stainless Steel (std) or Hastelloy C-22®	External	≤ 2 X 10 ⁻⁸ cc/sec He
Washer Back-up Options	316 Stainless Steel (std) or Hastelloy C-276®	Supply Pressure Effect	
O-ring Back-up Options	FKM (std) or PTFE	0.02 C _V	0.01 psig/100 psig (0.0007 barg/7 barg)
Poppet Screen	Hastelloy C-22® (76µm)	0.06 C _V	0.01 psig/100 psig (0.0007 barg/7 barg)
Self Relieving Seat	PEEK™	0.15 C _V	0.02 psig/100 psig (0.001 barg/7 barg)
Non-wetted		Internal Volume	
Cap Options	Nickel Plated Brass (std) or Stainless Steel	8.1cc without fittings	
Nut	Stainless Steel	Approx. Weight	
Knob Options	ABS (std) (ambient temp) or Aluminum	3.5 lbs. (1.6 kg)	
		Operating Conditions	
		Maximum Inlet	Refer to Range Table for specific information
		Outlet Options	0-10 psig (.7 barg), 1-30 psig (2 barg), 2-60 psig (4 barg), 3-100 psig (7 barg), or 10-250 psig (17 barg)
		Temperature	<i>Based upon seat material choice</i>
		PCTFE	-40°F to 150°F (-40°C to 66°C)
		PEEK™	-40°F to 275°F (-40°C to 135°C)
		Vespel®	-40°F to 500°F (-40°C to 260°C)
		Self Relieving Option	-40°F to 150°F (-40°C to 66°C)

For additional information on materials of construction, functional performance and operating conditions, see Regulator Technical Bulletin.

A-LOK® is a registered trademark of Parker Hannifin Corporation
Hastelloy C-22® and Hastelloy C-276® are registered trademarks of Haynes International, Inc.
PEEK™ is a trademark of Victrex plc.
Inconel® and Monel® are registered trademarks of Special Metals Corporation.
Vespel® is a registered trademark of DuPont Performance Elastomers L.L.C.

OFFER OF SALE:

The items described in this document are hereby offered for sale by Parker-Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the detailed "Offer of Sale" elsewhere in this document or available at www.parker.com/veriflo

WARNING USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE. THIS DOCUMENT IS FOR REFERENCE ONLY. PLEASE CONSULT FACTORY FOR LATEST PRODUCT DRAWINGS AND SPECIFICATIONS

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Proposition 65 Warning: This product contains chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.