

# IR6000 Series

Two Stage, General Purpose Pressure Regulator  
 Internally Threadless, Stainless Steel



## Value Proposition:

The IR6000 Series regulator offers high pressure capability with an inlet pressure up to 4,000 psig. The large convoluted Hastelloy C-22<sup>®</sup> 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<sup>®</sup> 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  
 Mobile App: m.parker.com/veriflo

## Product Features:

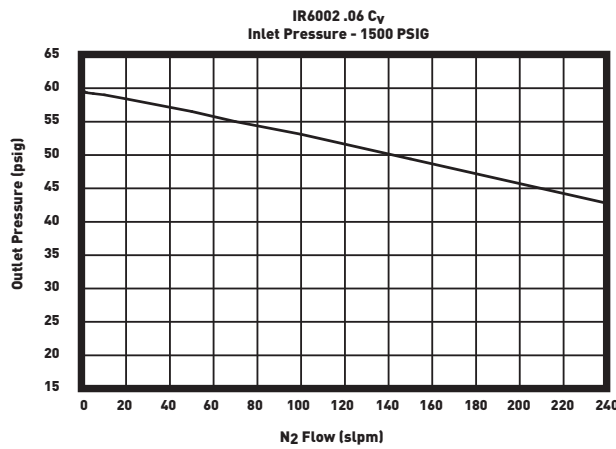
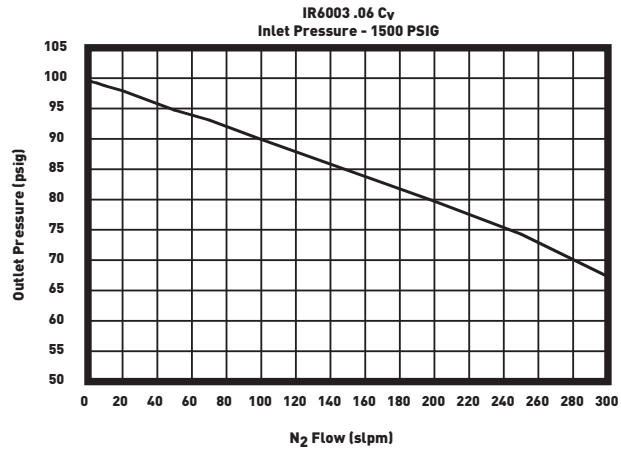
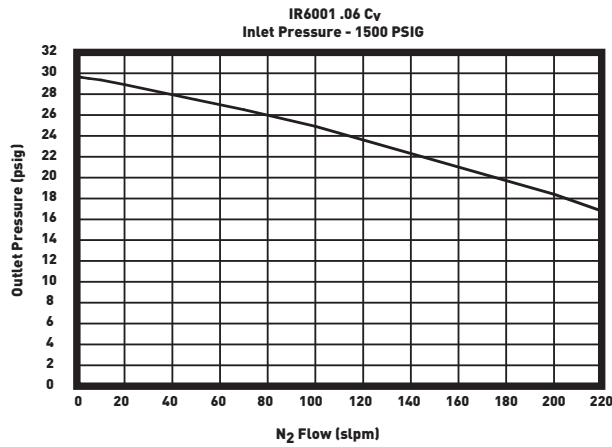
- Unique compression member loads the seal to the body without requiring a threaded nozzle or additional seals
- Positive upward and downward stops increase cycle life by preventing over stroking of the diaphragm
- Internally threadless design reduces particle generation. Low internal volume reduces purge times
- Selection of seat materials for media compatibility and temperature applications
- Cleaned for O<sub>2</sub> service is standard
- Express Service Program available noted in *green italic print*



# IR6000 SERIES

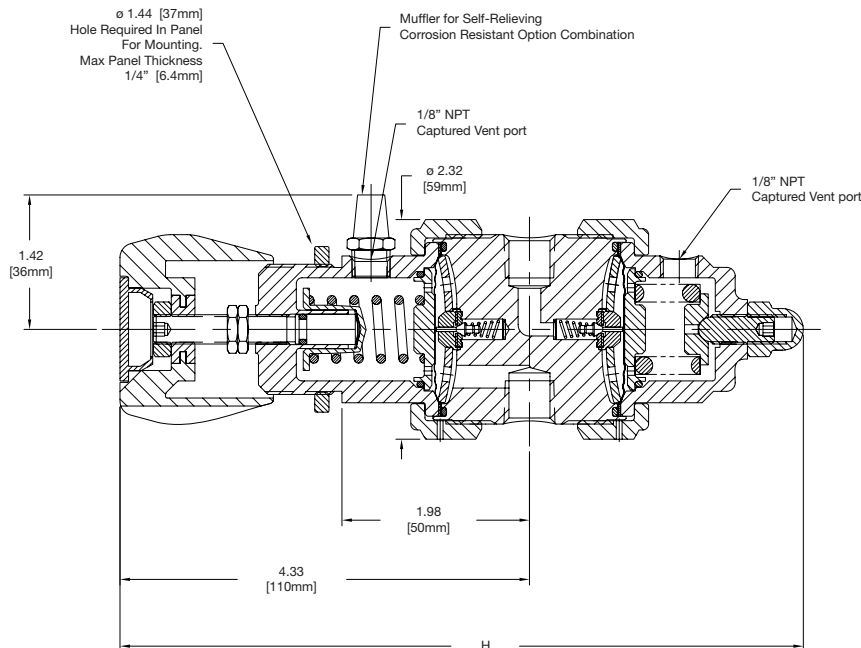
## Flow Curves

Additional flow curves available upon request



Basic Model	Range Table		
	Max Inlet PSIG		
	0.06 Cv	0.02 Cv	0.15 Cv
IR6000	4000	4000	1250
IR6001	4000	4000	1250
IR6002	4000	4000	1250
IR6003	4000	4000	1250
IR6004	4000	4000	1250
IR6015	4000	4000	1250

## Dimensional Drawing



Basic Model	Overall Height Table	
	H	
IR6000	7.22	[183.4MM]
IR6001	7.22	[183.4MM]
IR6002	7.22	[183.4MM]
IR6003	7.22	[183.4MM]
IR6004	7.81	[198.4MM]
IR6015	7.22	[183.4MM]

Safety Guide and Installation and Operating Instructions available at  
[www.parker.com/veriflo](http://www.parker.com/veriflo)

# IR6000 SERIES

## Ordering Information

Build an IR6000 Series regulator by replacing the numbered symbols with an option from the corresponding tables below.

Color Explanations: Black = Standard Lead Time Configurations  
 Blue = Extended Lead Time Configurations  
 Green *Italic* = Express Service Program (ESP)

For an explanation of Ordering options please reference literature 25000275 at [www.parker.com/veriflo](http://www.parker.com/veriflo)



Sample: **IR60 02 S K 4P 01 30 4 B S 580**

Finished Order: **IR6002SK4P01304BS580**

### 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

S = 316L Stainless Steel  
 H = Hastelloy C-22<sup>®</sup> SST gauges  
 M = Monel<sup>®</sup> SST gauges

### 3 Flow Capacity

= 0.06 C<sub>V</sub> Standard  
 1 = 0.02 C<sub>V</sub>  
 2 = 0.15 C<sub>V</sub>

### 4 Seat Material

K = PCTFE  
 P = PEEK<sup>™</sup>  
 V = Vespe<sup>®</sup>

### 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  
 6P = 6 Ports Two X's for gauge ports  
 See Regulator Porting Guide for additional options and port layouts

Note: Ports may be plugged for NPT threaded product.

### 6 Outlet Gauge

Outlet Gauge	Basic Series
03 = 0 - 30 psig	IR6000
OL = 0 - 60 psig	IR6001
01 = 0 - 100 psig	IR6002
2 = 0 - 200 psig	IR6003
4 = 0 - 400 psig	IR6004
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 C<sub>V</sub> option  
 40 = 4000 psig  
 Additional ranges available upon request

### 8 Port Style

2 = 1/8" NPT Female  
 4 = 1/4" NPT Female  
 6 = 3/8" NPT Female  
 4T = 1/4" A-LOK<sup>®</sup>  
 6T = 3/8" A-LOK<sup>®</sup>  
 All Gauge ports are 1/4" NPT Female

### 9 Port Mounting

B = Standard - No other options

### 10 Optional Features

This section can have multiple options

B = True Ported Body No plugs  
 C = Corrosion Resistant External Stainless Steel Cap  
 G = Tamper Proof Not available with M option  
 M = Metal Knob (Black) Not available with G option. Required for temperatures above 150° F  
 L = PTFE Backup O-Ring PCTFE and PEEK<sup>™</sup> Seats Only  
 R2 = Relief Valve, 2nd Stage (LP) 4PB, 5P and 6P Only  
 S = Self Relieving Temperature rating -40°F to 150°F (-40°C to 66°C)  
 V = Outlet Valve NV17SS44MF  
 T = Hastelloy Trim Includes carrier and back-up washer. Option is for Stainless Steel body - Hastelloy<sup>®</sup> trim is std with Hastelloy<sup>®</sup> and Monel<sup>®</sup> bodies

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.

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

### 11 CGA#

320, 330, 350, 510, 580, 590 or 660  
 Do not exceed the rated pressure of the CGA connection.

# IR6000 Series

## Specifications

Materials of Construction	
<b>Wetted</b>	
Body Options	316L Stainless Steel (std) or Hastelloy C-22® or Monel® (Hastelloy® Trim is std with Hastelloy® and Monel® bodies)
Compression Member	Inconel 625®
Diaphragm	Hastelloy C-22®
Poppet	Hastelloy C-276®
Poppet Spring	Inconel X750®
Seat Options	PCTFE (std), Vespel® or PEEK™
Carrier Options	316L Stainless Steel (std) or Hastelloy C-22®
Washer Back-up Options	316 Stainless Steel (std) or Hastelloy C-276®
O-ring Back-up Options	FKM (std) or PTFE
Inlet Screen / Filter	316 Stainless Steel (std) (60µm mesh screen, 10µm Filter) Hastelloy® (on Hastelloy®, Monel® bodies)
Self Relieving Seat	PEEK™
<b>Non-wetted</b>	
Cap Options	Nickel Plated Brass (std) or Stainless Steel
Nut	Stainless Steel
Knob Options	ABS (std) (ambient temp) or Aluminum

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.

Functional Performance	
<b>Design</b>	
Burst Pressure	12,000 psig (828 barg)
Proof Pressure	6,000 psig (414 barg)
<b>Flow Capacity</b>	
C <sub>V</sub> Options	C <sub>V</sub> 0.06 (std), C <sub>V</sub> 0.02, C <sub>V</sub> 0.15
<b>Leak Rate</b>	
Internal	Bubble Tight
External	Bubble Tight
<b>Supply Pressure Effect</b>	
<i>Based upon C<sub>V</sub> Option</i>	
0.02 C <sub>V</sub>	0.01 psig/100 psig (0.0007 barg/7 barg)
0.06 C <sub>V</sub>	0.01 psig/100 psig (0.0007 barg/7 barg)
0.15 C <sub>V</sub>	0.02 psig/100 psig (0.001 barg/7 barg)
<b>Internal Volume</b>	
8.1 cc without fittings	
<b>Approx. Weight</b>	
3.5 lbs. (1.6 kg)	
<b>Operating Conditions</b>	
Maximum Inlet	Refer to Range Table for specific information
Outlet Options	0-10 psig (0.7 barg), 1-30 psig (2 barg), 2-60 psig (4 barg), 3-100 psig (7 barg), 5-150 psig (10 barg), 10-250 psig (17 barg)
Temperature	Metal Knob required for temperatures above 150°F
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.

### 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](http://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.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing are subject to change by Parker Hannifin Corp and its subsidiaries at any time without notice.

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

© 2009 Parker Hannifin Corporation



Use mobile device to scan this QR Code.

LitPN: 25000141

Rev: L

Date of Issue 03/2013



**Hanley Controls Clonmel Ltd**  
Gortnafieur, Clonmel, Co. Tipperary  
Tel: +353 (0)52 6122722  
e-mail: [info@hccl.ie](mailto:info@hccl.ie)  
web: [www.hccl.ie](http://www.hccl.ie)

ENGINEERING YOUR SUCCESS.