

# HF300 Datasheet

HIGH-FLOW PRESSURE REGULATOR



● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 300 bar (4,350 psi) | Max Outlet: 10 bar (145 psi) | Cv 4.0



## INTRODUCING THE HF300...

The HF300 is a non-venting diaphragm-sensed high-flow pressure regulator for gas or liquid applications with a **balanced main valve** design as standard. The liquid version includes a Vespel® seat, whilst the gas version features PEEK™ seating. The HF300 provides stable control with a high level of accuracy under varying inlet pressures.

An unbalanced option can be offered alternatively for applications with maximum inlet pressures of up to 50 bar (725 psi).

## STANDARD MATERIALS OF CONSTRUCTION

PART	MATERIALS
Body and Bonnet	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
Main Valve Pin	AISI 316 / 316L Stainless Steel (UNS S31600 / S31603)
Soft Seat	Vespel® or PEEK™
Valve Spring	Inconel® X750
Diaphragm	NBR / FPM
'O'-Ring Seals	FKM / FPM
Loading Spring	High Grade Alloy Spring Steel

## SPECIFICATION

Max. Rated Inlet Pressure	300 bar (4,350 psi)
Outlet Ranges	Up to 10 bar (145 psi)
Design Proof Pressure	150% max. working pressure
Seat Leakage	In accordance with ANSI/FCI 70-3
Weight	9.7kg (21.4lbs)

## FEATURES AND BENEFITS

### 1 ELASTOMERIC DIAPHRAGM

Provides accurate pressure regulation.

### 2 BALANCED MAIN VALVE DESIGN

Improved control across the pressure range.

### 3 HIGH FLOW COEFFICIENT

CV 4.0 for high-flow capabilities.

### 4 SUITABLE FOR GAS OR LIQUID APPLICATIONS

Versatile usage across a range of media-types.

**NOTE:** Product availability and specifications contained herein are subject to change without notice. Consult local distributor or factory for potential revisions and/or service related issues. Pressure Tech Ltd support with product selection recommendations only - it is the users responsibility to ensure the product is suitable for their specific application requirements.



DESIGNED AND BUILT IN THE UK

#### PRESSURE TECH LTD

Unit 24, Graphite Way, Hadfield, Glossop, Derbyshire, UK, SK13 1QH

T +44 (0)1457 899 307

E [info@pressure-tech.com](mailto:info@pressure-tech.com)

W [www.pressure-tech.com](http://www.pressure-tech.com)

140619

PAGE:  
1 OF 4

# HF300 Datasheet

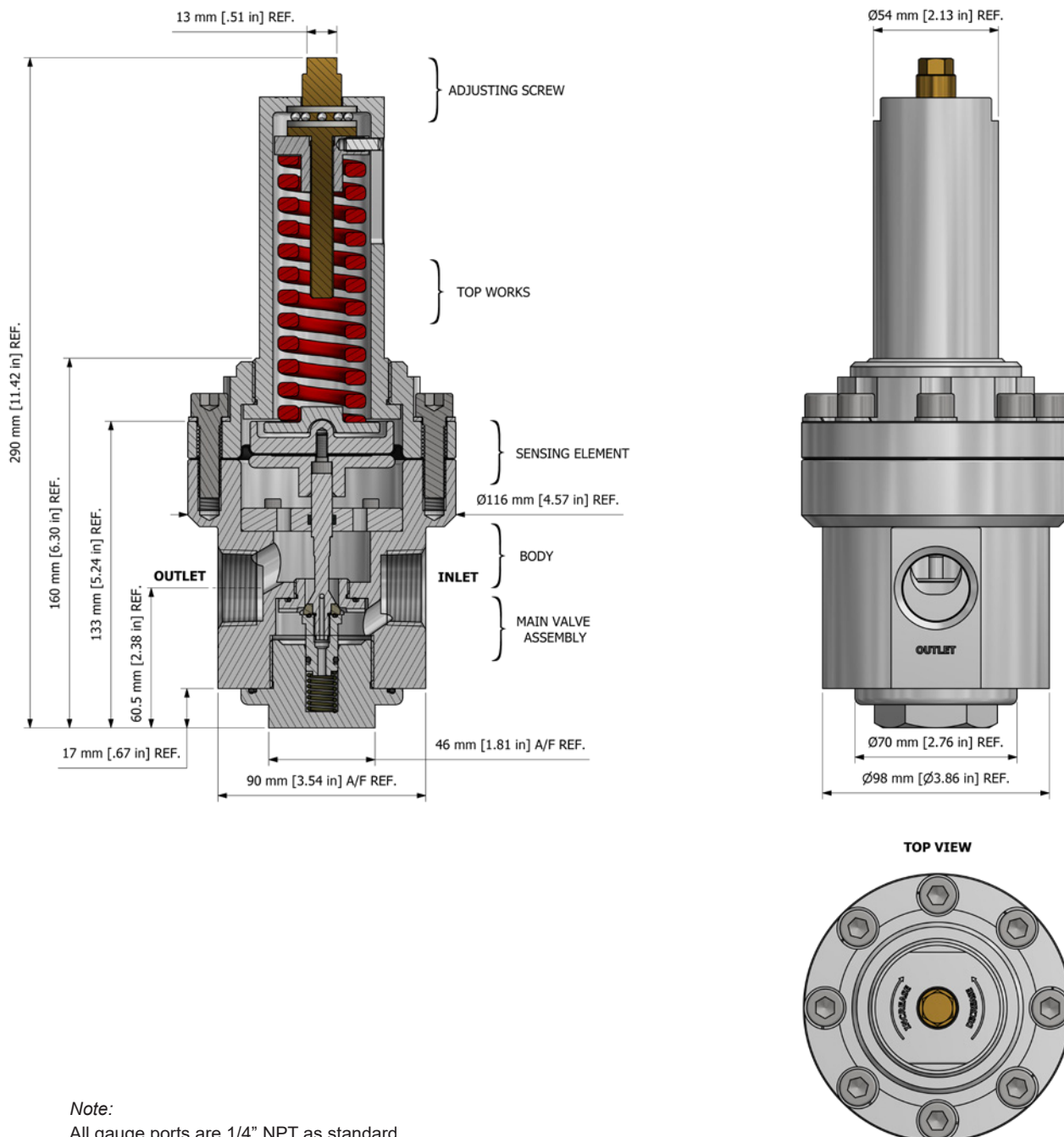
## HIGH-FLOW PRESSURE REGULATOR



☒ Gas   ☒ Liquid   |   ☒ Diaphragm   ☐ Piston   |   ☒ Self-Venting   ☒ Non-Venting   |   Max Inlet: 300 bar (4,350 psi)   |   Max Outlet: 10 bar (145 psi)   |   Cv 4.0

### DRAWINGS AND INSTALLATION DIMENSIONS

Dimensions shown for 1" NPT option - please contact the office for additional connections options.



*Note:*

All gauge ports are 1/4" NPT as standard.

**NOTE:** Product availability and specifications contained herein are subject to change without notice. Consult local distributor or factory for potential revisions and/or service related issues. Pressure Tech Ltd support with product selection recommendations only - it is the users responsibility to ensure the product is suitable for their specific application requirements.



DESIGNED AND BUILT IN THE UK

#### PRESSURE TECH LTD

Unit 24, Graphite Way, Hadfield, Glossop, Derbyshire, UK, SK13 1QH

T +44 (0)1457 899 307

E [info@pressure-tech.com](mailto:info@pressure-tech.com)

W [www.pressure-tech.com](http://www.pressure-tech.com)

140619

PAGE:  
2 OF 4

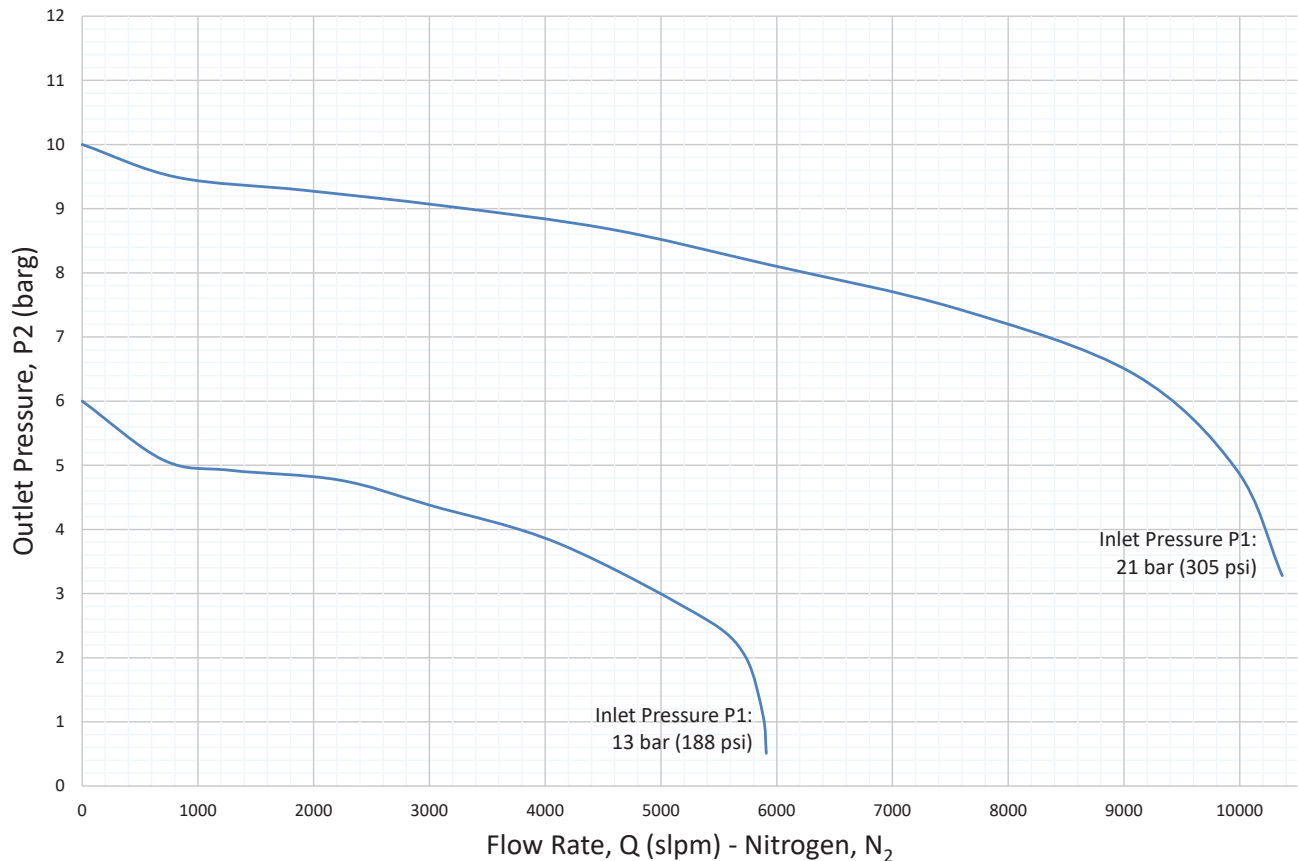
# HF300 Datasheet

## HIGH-FLOW PRESSURE REGULATOR

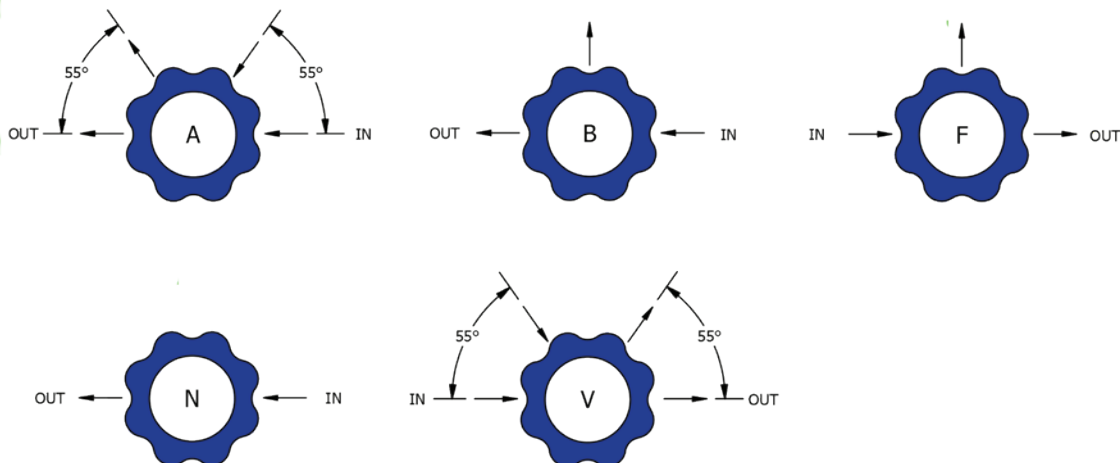


☒ Gas 
 ☒ Liquid 
 | 
 ☒ Diaphragm 
 ☐ Piston 
 | 
 ☒ Self-Venting 
 ☒ Non-Venting 
 | 
 Max Inlet: 300 bar (4,350 psi) 
 | 
 Max Outlet: 10 bar (145 psi) 
 | 
 Cv 4.0

### FLOW CURVE



### PORTING CONFIGURATIONS



#### Notes:

Additional porting configurations are available - please contact the office for further information.

**NOTE:** Product availability and specifications contained herein are subject to change without notice. Consult local distributor or factory for potential revisions and/or service related issues. Pressure Tech Ltd support with product selection recommendations only - it is the users responsibility to ensure the product is suitable for their specific application requirements.



DESIGNED AND BUILT IN THE UK

#### PRESSURE TECH LTD

Unit 24, Graphite Way, Hadfield, Glossop, Derbyshire, UK, SK13 1QH

T +44 (0)1457 899 307

E [info@pressure-tech.com](mailto:info@pressure-tech.com)

W [www.pressure-tech.com](http://www.pressure-tech.com)

140619

PAGE:  
3 OF 4

# HF300 Datasheet

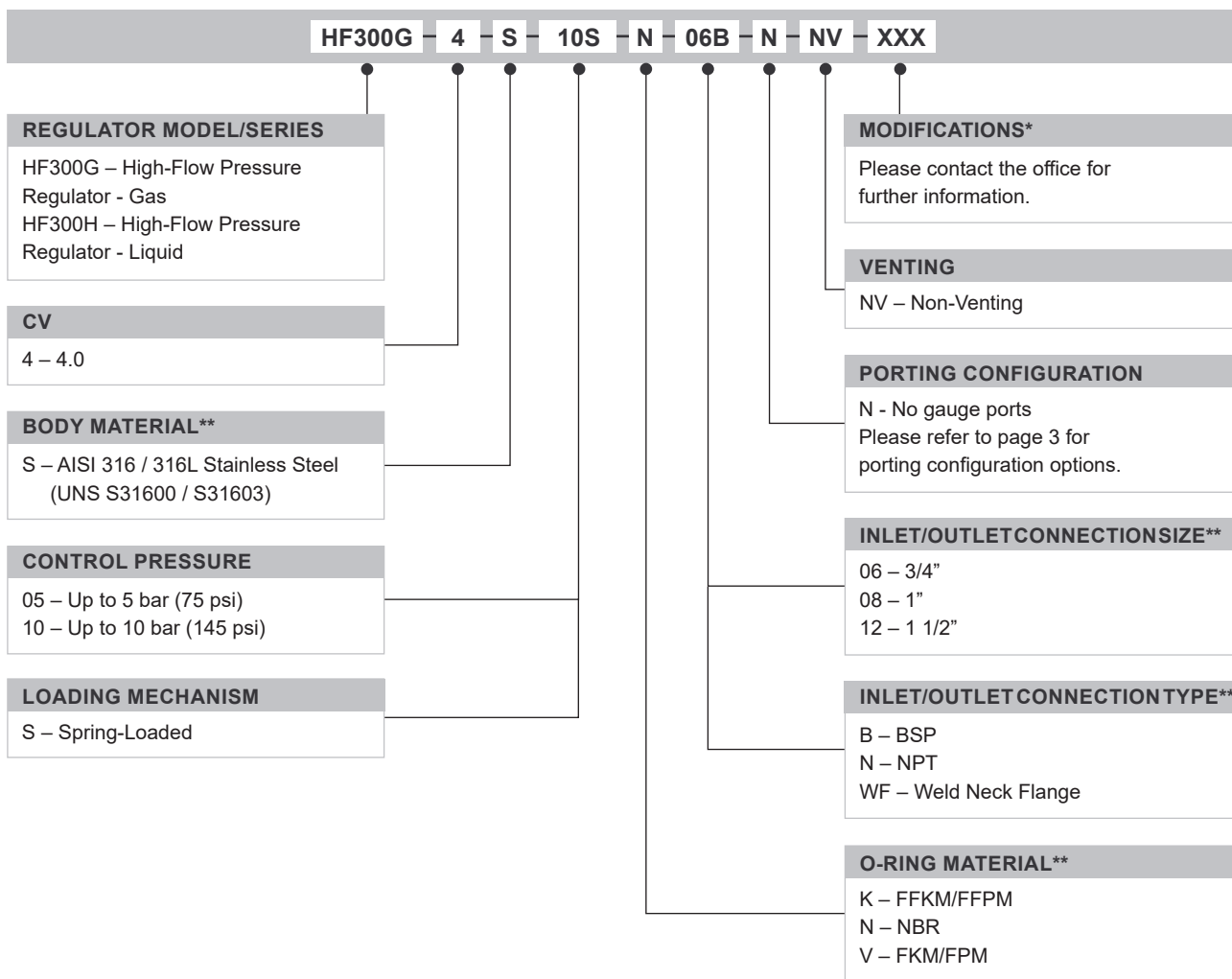
## HIGH-FLOW PRESSURE REGULATOR



● Gas ● Liquid | ● Diaphragm ● Piston | ● Self-Venting ● Non-Venting | Max Inlet: 300 bar (4,350 psi) | Max Outlet: 10 bar (145 psi) | Cv 4.0

### ORDERING INFORMATION

To build a Pressure Tech part number, simply combine the characters identified below in sequence:



### OPTIONAL EXTRAS

	PART NUMBER	DESCRIPTION
Service Kit	SRK-HF300...	Various options available

*Note:*  
Ancillary Equipment and additional Service Kit options also available.

**TRADEMARKS:** Inconel® is a registered trademark of Inco Alloys International  
PEEK™ is a trademark of Victrex PLC  
Vespel® is a registered trademark of DuPont

\* Where applicable  
\*\* Other materials may be available - please contact the office

**NOTE:** Product availability and specifications contained herein are subject to change without notice. Consult local distributor or factory for potential revisions and/or service related issues.  
Pressure Tech Ltd support with product selection recommendations only - it is the users responsibility to ensure the product is suitable for their specific application requirements.



DESIGNED AND BUILT IN THE UK



**PRESSURE TECH LTD**  
Unit 24, Graphite Way, Hadfield, Glossop, Derbyshire, UK, SK13 1QH  
T +44 (0)1457 899 307  
E [info@pressure-tech.com](mailto:info@pressure-tech.com)  
W [www.pressure-tech.com](http://www.pressure-tech.com)

140619

PAGE:  
4 OF 4