

# SERIES HPI 722/742

## HIGH PURITY TWO-STAGE BARSTOCK REGULATOR



Model shown (HPI-742-R-029-000-A)  
with additional accessories to be ordered separately

### KEY FEATURES

Model HPI 742 is a regulator for cylinders where a constant delivery pressure from full to near empty is a required condition.

- Recommended for purity levels of grade 6.0 (99.9999) and higher
- Stainless steel version HPI 742 applicable for corrosive gases after prior confirmation of the material's compatibility\*
- Hastelloy®\*\* C276 diaphragm eliminates contamination from diffusion or outgassing
- One-piece encapsulated seat design includes a sintered filter to protect the seat from particulate contamination
- Brass chrome-plated bonnet barstock or 316L stainless steel as optional
- 316L stainless steel body for HPI 742, brass nickel-plated body for HPI 722
- $1 \times 10^{-9}$  mbar l/s He inboard helium leak rate to maintain gas purity levels
- 1/8" NPT thread on the bonnet venting for safety
- Maximum inlet pressure 300 bar (4350 psig), except for Acetylene: max. 25 bar (362 psig)
- Safety relief valve as standard

### Applications »

- High purity gas applications
- Research sample systems gases
- Process analyzer gases
- Gas chromatography
- EPA protocol gases
- Laser gas systems
- Emission monitoring systems



\* Please check the material's compatibility in our Specialty Gas catalog.  
\*\* Hastelloy® is a registered trademark name of Haynes International, Inc

## TECHNICAL DATA

Type	Two-stage cylinder regulator
Purity	6.0 and higher
Inlet pressure	Max. 300 bar (4350 psig) For Acetylene: max. 25 bar (362 psig)
Outlet pressure	1/2/4/10/20/34 bar (15/29/58/145/290/500 psig) For Acetylene: max. 1,5 bar (21 psig)
Flow capacity	Cv = 0,06
Gauges	49 mm dual scale (bar/psig) 316L stainless steel (HPI742) or chrome-plated brass (HPI 722)
Oxygen use	Suitable
Inlet/Outlet ports	6x 1/4" FNPT
Weight	2,01 kg
Safety relief valve	Included

## MATERIALS

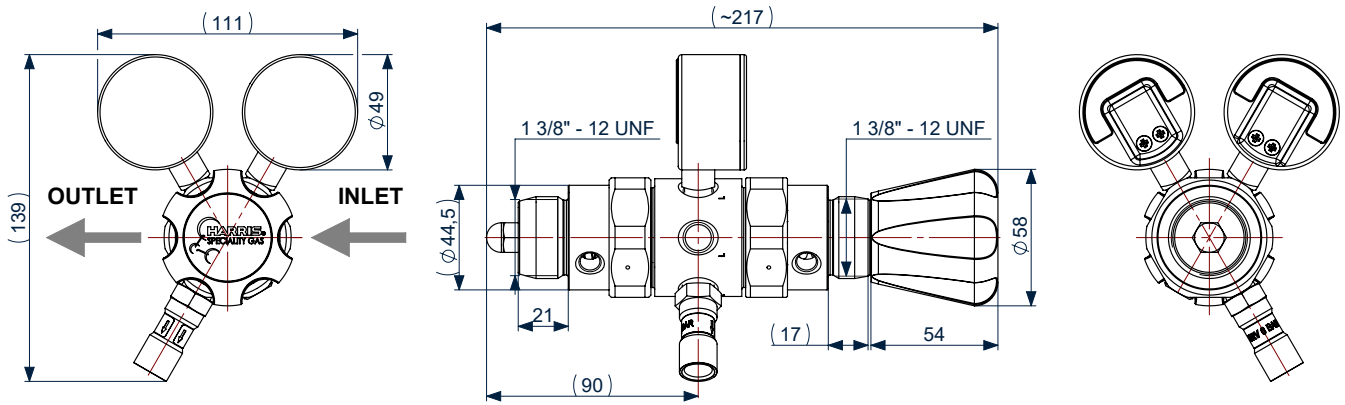
Body	316L stainless steel barstock (HPI 742) or nickel-plated brass barstock (HPI 722)
Bonnet	Nickel-plated brass barstock or 316L stainless steel as optional
Diaphragm (regulator)	Hastelloy <sup>***</sup> C276
Nozzle	316L stainless steel (HPI 742) or brass (HPI 722)
Seat	PTFE Teflon <sup>****</sup>
Seals	PTFE Teflon <sup>****</sup>
Filter	Sintered stainless steel - 10 micron (HPI 742) or nickel-plated sintered bronze - 10 micron (HPI 722)
Adjusting Knob	ABS plastic
Safety relief valves	316L SS (HPI 742) or brass nickel plated (HPI 722)

<sup>\*\*</sup> Hastelloy<sup>®</sup> is a registered trademark name of Haynes International, Inc  
<sup>\*\*\*</sup> Teflon<sup>®</sup> is a registered trademark of The Chemours Company

## PRODUCT CONFIGURATION

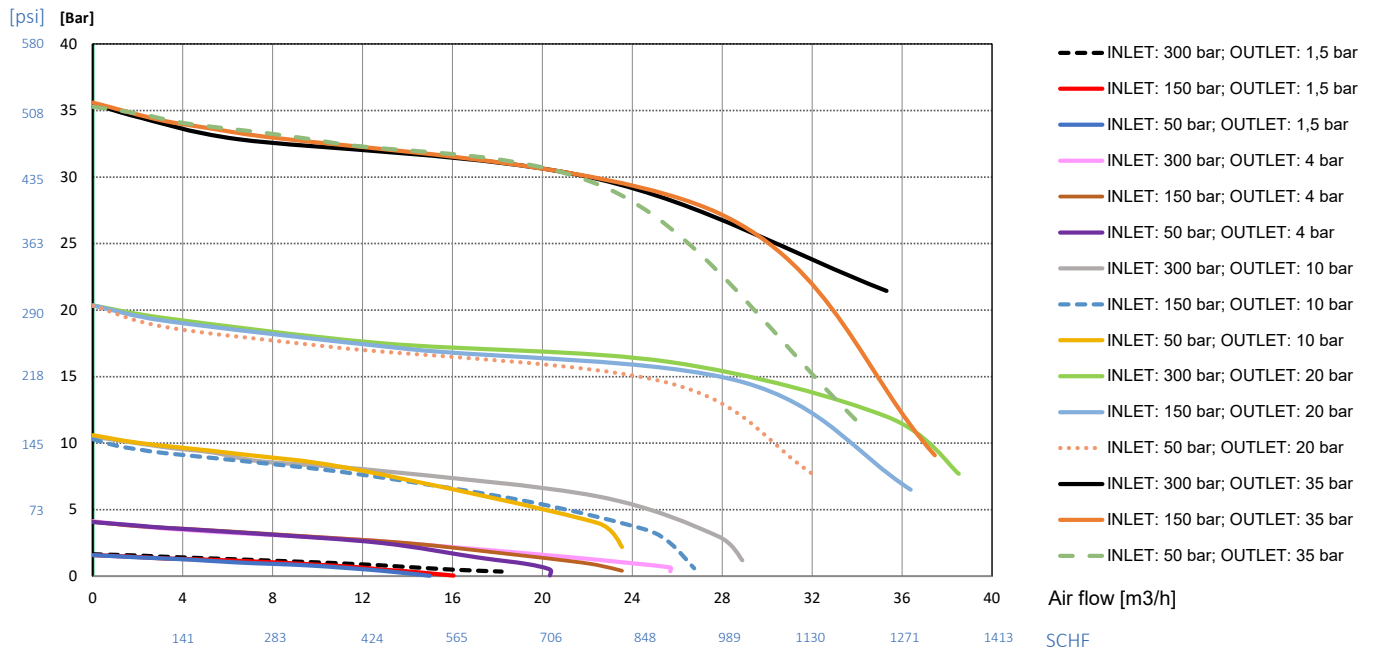
MODEL	MATERIAL	INLET CONFIGURATION	OUTLET PRESSURE	INLET CONNECTION	OUTLET CONFIGURATION	OPTIONS	GAS TYPE
HP 722	Nickel-plated brass	Right (only) R	0 - 1 bar 0 - 15 psig	015	1/4" FNPT 000	A He leak cert. (inboard)	2 Please specify
HP 742	Stainless steel		0 - 2 bar 0 - 29 psig	029	DIN 477 D...	B No gauges	3
			0 - 4 bar 0 - 58 psig	058	CGA C...	C With relief valve (at low pressure side) - standard	4
			0 - 10 bar 0 - 145 psig	145	AFNOR NF...	D 60 bar inlet gauge	6
			0 - 20 bar 0 - 290 psig	290	BS341 BS...	E Diaphragm Valve with lever	DVL
Other options upon request, please contact us			0 - 34 bar 0 - 500 psig	500	UNI U...	F Hastelloy <sup>®</sup> diaphragm	HA
					NEN 3268 N...	G Stainless steel bonnet	SB
					ISO 5145 I...	H Panel Nut	PN
For example:							
HP1722		R		058	000	BE	4 Ar

# TECHNICAL DRAWING



# FLOW CHARTS

HPI 722/742



## NOTES

### CUSTOMER ASSISTANCE POLICY

The business of Lincoln Electric is manufacturing and selling high quality welding equipment, automated welding systems, consumables, and cutting equipment. Our challenge is to meet the needs of our customers, who are experts in their fields, and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or technical information about their use of our products. Our employees respond to inquiries to the best of their ability based on information and specifications provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment, or to provide engineering advice in relation to a specific situation. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or communications. Moreover, the provision of such information or technical information does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or technical information, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose or any other equivalent or similar warranty is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the definition of specifications, and the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.



**Contact Harris for pricing and custom configurations**

+48 74 646 23 52

[marketingharris@lincolnelectric.eu](mailto:marketingharris@lincolnelectric.eu)

**Harris Products Group**  
ul. Strefowa 8, 58-200 Dzierzoniow, Poland  
[www.harrisproductsgroup.eu](http://www.harrisproductsgroup.eu)