

# SERIES HPI 721/741

## HIGH PURITY SINGLE-STAGE BARSTOCK REGULATOR



Model shown (HPI-741-R-145-000-A)  
with additional accessories to be ordered separately

### KEY FEATURES

Model HPI 741 is a regulator for applications where a slight rise in delivery pressure from full to empty cylinder can be tolerated.

- Recommended for purity levels of grade 6.0 [99.9999] and higher
- Stainless steel version HPI 741 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 nickel-plated bonnet barstock or 316L stainless steel as optional
- 316L stainless steel body for HPI 741, brass nickel-plated body for HPI 721
- $1 \times 10^{-9}$  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]
- 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	Single-stage cylinder regulator
Purity	Up to 6.0
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	Kv = 0,0688 [Cv = 0,08]
Gauges	49 mm dual scale (bar/psig) 316L stainless steel (HPI741) or nickel-plated brass (HPI 721)
Oxygen use	Suitable
Inlet/Outlet ports	6x 1/4" FNPT
Weight	1,32 kg
Safety relief valve	Included

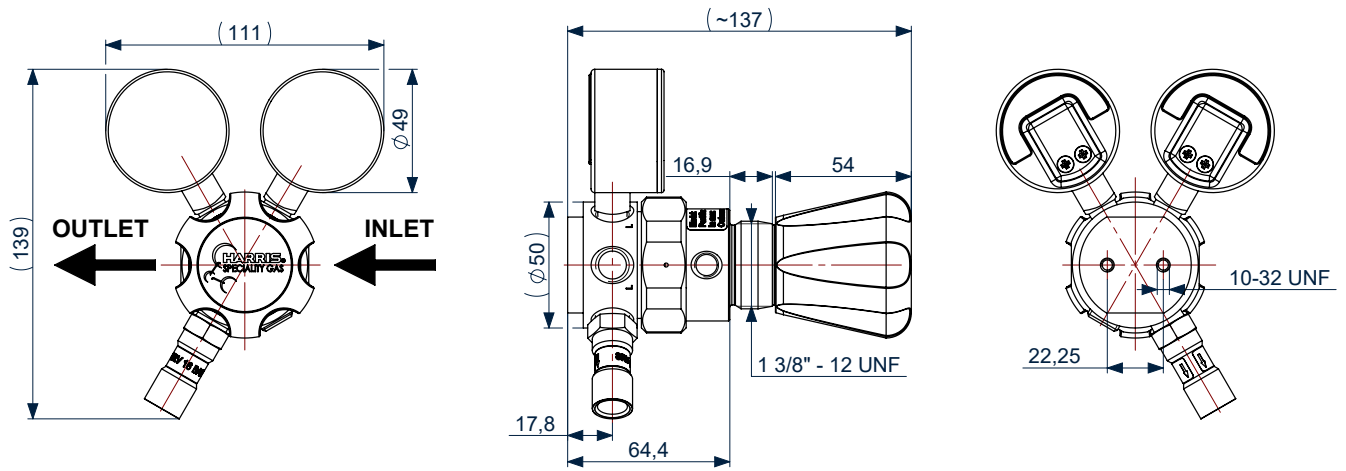
## MATERIALS

Body	316L stainless steel barstock (HPI 741) or nickel-plated brass barstock (HPI 721)
Bonnet	Nickel-plated brass barstock or 316L stainless steel as optional
Diaphragm (regulator)	Hastelloy <sup>®</sup> *** C276
Nozzle	316L stainless steel (HPI 741) or brass (HPI 721)
Seat	PTFE Teflon <sup>®</sup> ***
Seals	PTFE Teflon <sup>®</sup> ***
Filter	Sintered stainless steel - 10 micron (HPI 741) or nickel-plated bronze - 25 micron (HPI 721)
Adjusting Knob	ABS plastic
Safety relief valves	316L SS (HPI 741) or brass nickel plated (HPI 721)

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\*\*\* Teflon<sup>®</sup> is a registered trademark of The Chemours Company

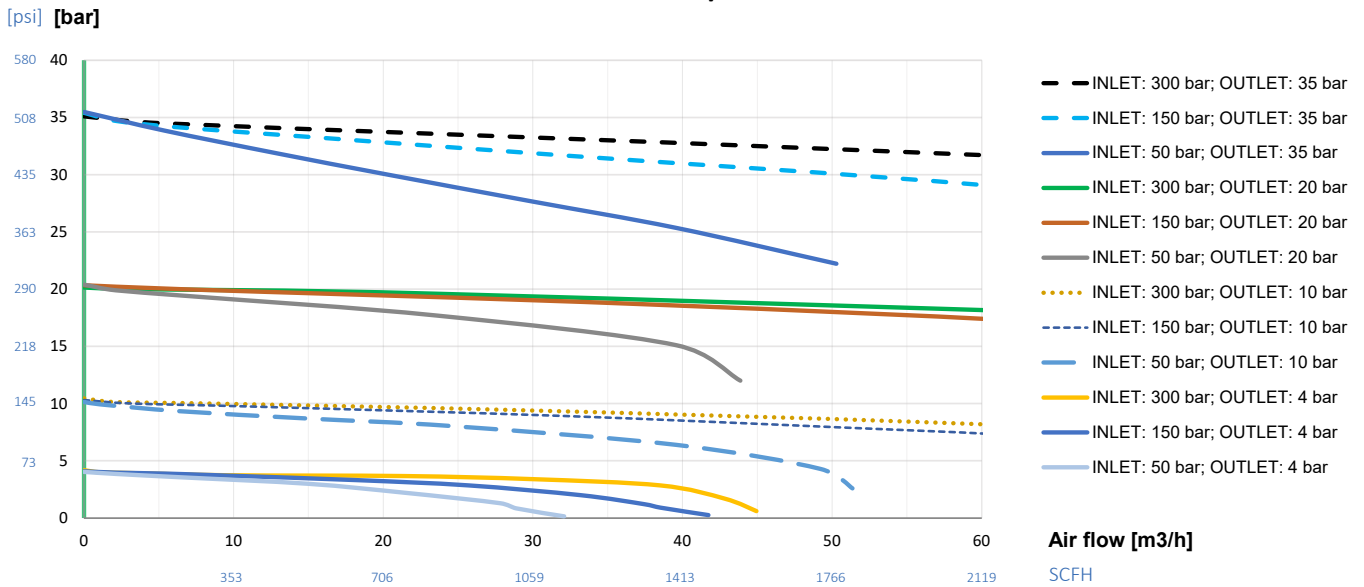
## PRODUCT CONFIGURATION

MODEL	MATERIAL	INLET CONFIGURATION		OUTLET PRESSURE	INLET CONNECTION			OUTLET CONFIGURATION		OPTIONS		GAS TYPE
HPI 721	Nickel-plated brass	Right	R	0 - 1 bar 0 - 15 psig	015	1/4" FNPT	000	1/4" FNPT	A	He leak cert. (inboard)	2	Please specify
HPI 741	Stainless steel			0 - 2 bar 0 - 29 psig	029	DIN 477	D...	1/4" FNPT diaphragm valve	B	No gauges	3	
				0 - 4 bar 0 - 58 psig	058	CGA	C...	1/4" MNPT nipple	C	With relief valve (standard)	4	
				0 - 10 bar 0 - 145 psig	145	AFNOR	NF...	1/4" tube fitting	D	60 bar inlet gauge	6	
				0 - 20 bar 0 - 290 psig	290	BS341	BS...	1/8" tube fitting	E	Wall Bracket	P	
	Other options upon request, please contact us			0 - 34 bar 0 - 500 psig	500	UNI	U...	6 mm tube fitting	F	Hastelloy <sup>®</sup> diaphragm	HA	
						NEN 3268	N...	8 mm tube fitting	G	Stainless steel bonnet	SB	
						ISO 5145	I...	10 mm tube fitting	H	Panel Nut	PN	
For example:												
HPI 721			R		145	D 6			BF		4	Ar



FLOW CHARTS

HPI-721 / 741 flow chart



## NOTES

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