

SERIES HPI 721/741

HIGH PURITY SINGLE-STAGE BARSTOCK REGULATOR



Model shown (HPI-741-R-145-000-A-4)
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*
- Standard 316L stainless steel diaphragm eliminates contamination from diffusion or outgassing
- Hastelloy®** C276 diaphragm
- 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 741, brass chrome-plated body for HPI 721
- 1×10^{-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)

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

Applications »

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



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	1,5/2/4/10/20 bar (21/29/58/145/290 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 chrome-plated brass (HPI 721)
Oxygen use	Suitable
Inlet/Outlet ports	6x 1/4" FNPT
Weight	1,32 kg

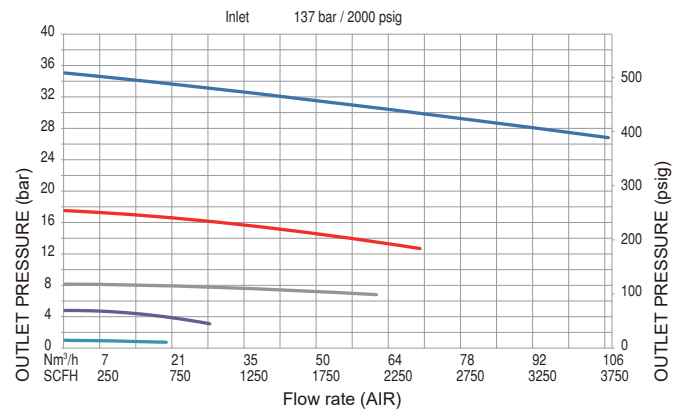
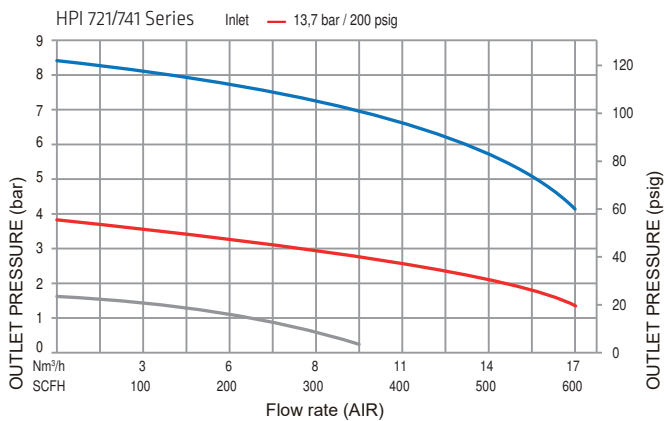


MATERIALS

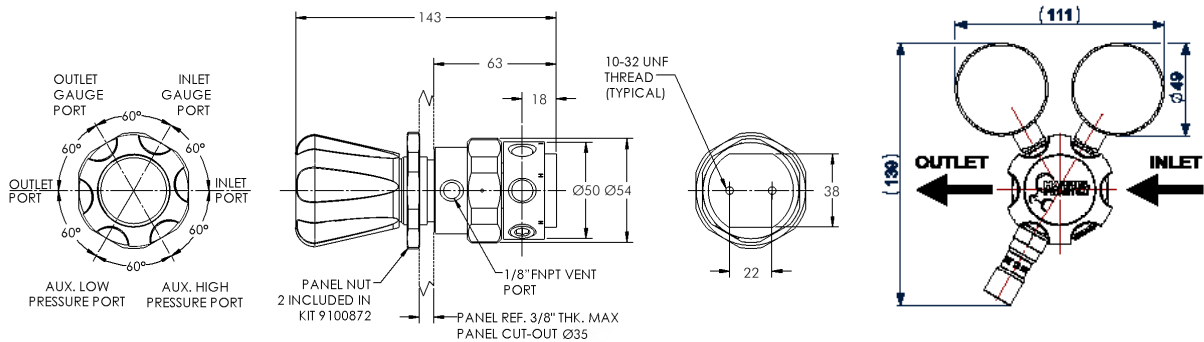
Body	316L stainless steel barstock (HPI 741) or nickel-plated brass barstock (HPI 721)
Bonnet	Chrome-plated brass barstock or 316L stainless steel as optional
Diaphragm (regulator)	Hastelloy [®] ** C276
Nozzle	316L stainless steel (HPI 741) or brass (HPI 721)
Seat	PTFE Teflon [®] ***
Seals	PTFE Teflon [®] ***
Filter	Sintered stainless steel - 10 micron (HPI 741) or nickel-plated sintered bronze - 10 micron (HPI 721)
Adjusting Knob	ABS plastic

** Hastelloy[®] is a registered trademark name of Haynes International, Inc
*** Teflon[®] is a registered trademark of The Chemours Company

FLOW CHARTS



TECHNICAL DRAWING



PRODUCT CONFIGURATION

MODEL	MATERIAL	INLET CONFIGURATION	OUTLET PRESSURE	INLET CONNECTION	OUTLET CONFIGURATION	OPTIONS	GAS TYPE
HP 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
HP 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	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 [®] diaphragm	HA
				NEN 3268 N...	N... 8 mm tube fitting	G Stainless steel bonnet	SB
				ISO 5145 I...	I... 10 mm tube fitting	H Panel Nut	PN

For example:

HPI 721 R 145 D 6 BF 2 Ar