

# SERIES HPI 723/743

## HIGH PURITY SINGLE-STAGE LINE REGULATOR



Model shown  
HPI 743-145-000-A

### KEY FEATURES

Model HP 743 is a stainless steel pipeline regulator for pipeline and other applications up to 300 bar (4360 psig) inlet pressure.

- Recommended gases purity levels up to grade 6.0 (99.9999)
- Stainless steel version applicable also for corrosive gases after prior confirmation of the material's compatibility
- Hastelloy® C276 diaphragm eliminates contamination from diffusion or outgassing
- Low wetted surface area
- HP 723 - nickel-plated brass body, bonnet and fittings
- HP 743 - 316L stainless steel body, nickel-plated brass bonnet and fittings (stainless steel bonnet is available upon request)
- $1 \times 10^{-9}$  mbar l/s He inboard helium leak rate to maintain gas purity levels
- 4 ports flexible configuration
- 1/8" NPT thread on the bonnet venting for safety in 316L SS version
- Maximum inlet pressure 300 bar (4360 psig), except for Acetylene: max. 25 bar (362 psig)
- Cleaned for oxygen service
- Safety relief valve as optional

### Applications »

High purity gas applications  
Research sample systems gases  
Gas chromatography  
Calibration gas  
Process analyzer gases  
Emission monitoring systems



\* Please check the material's compatibility in our Specialty Gas catalog.

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## TECHNICAL DATA

Type	Single-stage
Purity	Up to 6.0
Inlet pressure	Max. 300 bar (4360 psig) For Acetylene: max. 25 bar (362 psig)
Outlet pressure	1,5/2/4/10/20/35 bar (21/29/58/145/290 psig/500 psig) For Acetylene: max 1,5 bar (21 psig)
Flow capacity	Kv = 0,1548 [Cv = 0,18]
Gauges	49mm dual scale (bar/psig)
Oxygen use	Suitable
Inlet/Outlet ports	4 x 1/4" FNPT
Weight	2,01 kg

## RELATED OPTIONS:

Wall mounting bracket: HPI-L-BPB



## MATERIALS

Body, bonnet	316L stainless steel barstock or nickel-plated brass barstock
Diaphragm (regulator)	Hastelloy®*C276
Nozzle	316L stainless steel (HPI 743) Brass (HPI 723)
Seat	PCTFE
Seals	PTFE (Teflon**) for corrosive gases
Filter	SS 316L Micro Sintered
Adjusting Knob	ABS plastic

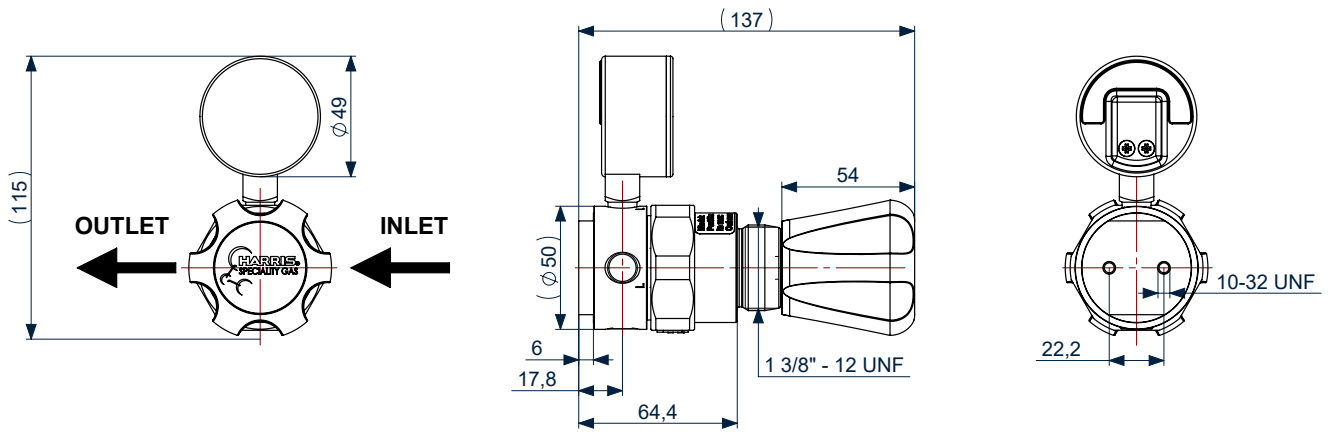
\* Hastelloy® is a registered trademark name of Haynes International, Inc

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## PRODUCT CONFIGURATION

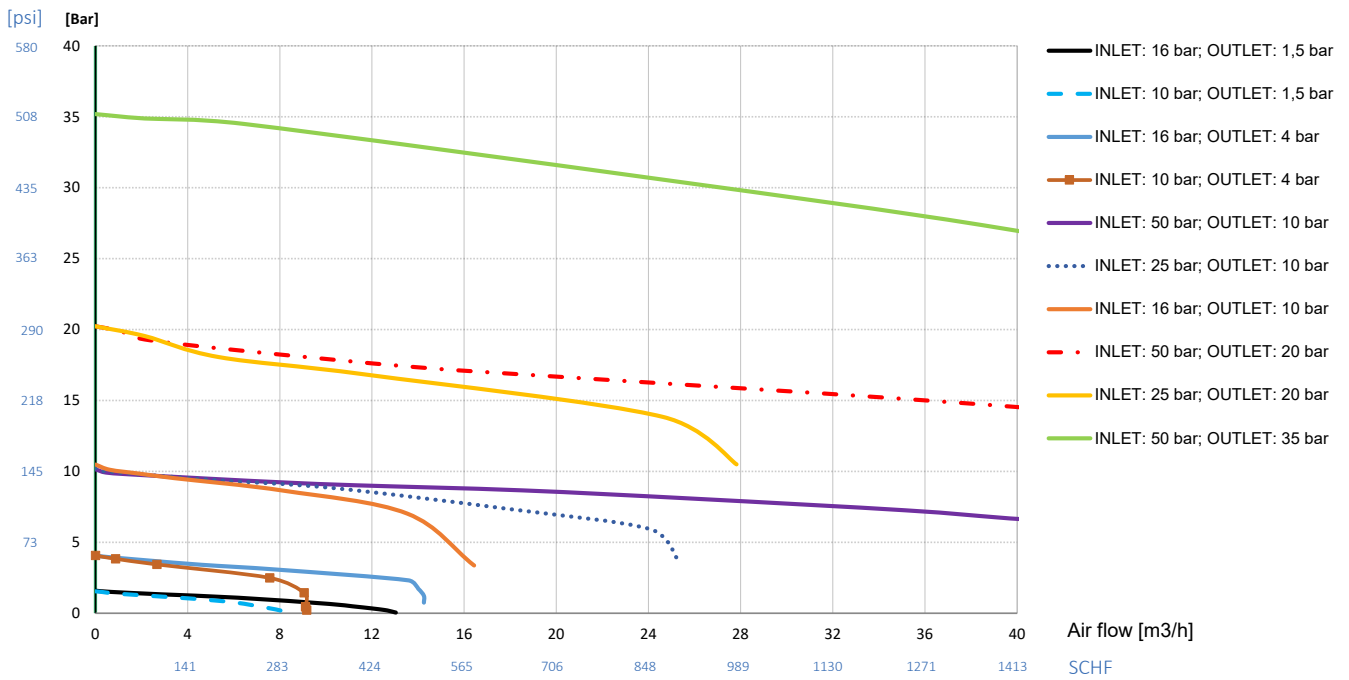
MODEL	MATERIAL	INLET CONFIGURATION		OUTLET PRESSURE		INLET CONNECTION		OUTLET CONFIGURATION			OPTIONS	GAS TYPE
HP 723	Nickel-plated brass	Right	R	0 - 1 bar 0 - 15 psig	015	1/4" FNPT	000	1/4" FNPT	A	He leak cert. (inboard)	2	Please specify
HP 743	Stainless steel			0 - 1,5 bar 0 - 21 psig	021	1/4" MNPT	001	1/4" FNPT diaphragm valve	B	No gauges	3	
				0 - 2 bar 0 - 29 psig	029	1/4" tube fitting	002	1/4" MNPT nipple	C	With relief valve	4	
				0 - 4 bar 0 - 58 psig	058	6 mm tube fitting	003	1/4" tube fitting	D	Corrosive Gases	7	
				0 - 10 bar 0 - 145 psig	145	8 mm tube fitting	004	1/8" tube fitting	E	High Pressure Contact Gauge	HPCG	
				0 - 20 bar 0 - 290 psig	290			6 mm tube fitting	F	Low Pressure Contact Gauge	LPCG	
				0 - 35 bar 0 - 500 psig	500			8 mm tube fitting	G	Diaphragm Valve with Lever	DVL	
								10 mm tube fitting	H	Stainless Steel Bonnet	SSB	
								G3/8" RH	I			
								G3/8" LH	J			
								G1/4" RH	K			
Other options upon request, please contact us												
For example:												
HP 723			R		058		000		BE		2	Ar

# TECHNICAL DRAWING



# FLOW CHARTS

HPI 723/743



## NOTES

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