

SERIES HPI 723/743

HIGH PURITY SINGLE-STAGE LINE REGULATOR



Model shown
HPI 743-145-000-A

KEY FEATURES

Model HPI 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
- HPI 723 - nickel-plated brass body, bonnet and fittings
- HPI 743 - 316L stainless steel body, nickel-plated brass bonnet and fittings (stainless steel bonnet is available upon request)
- 1×10^{-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.

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: P



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	Nickel-plated bronze - 25 micron
Adjusting Knob	ABS plastic

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

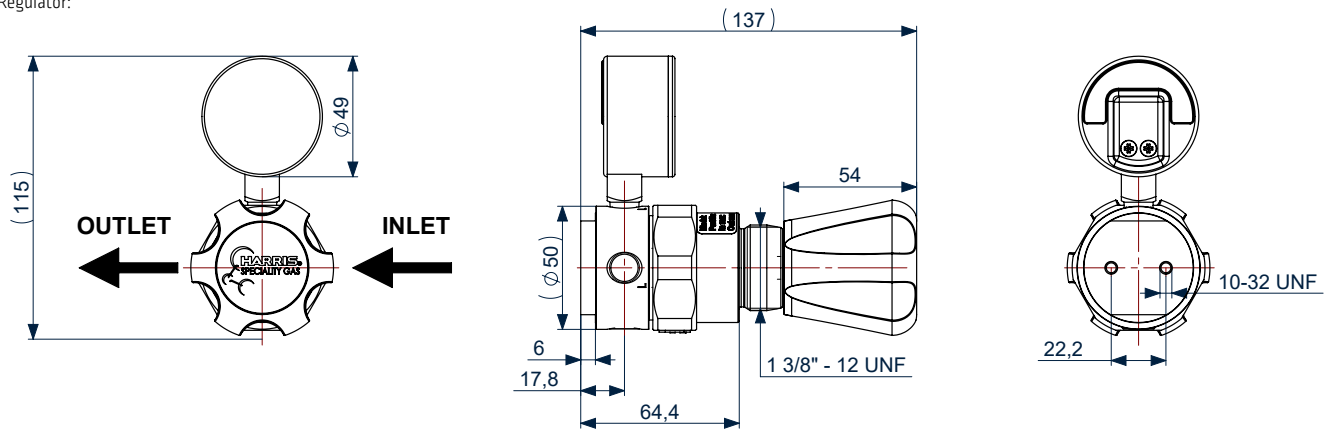
** Teflon® is a registered trademark of The Chemours Company

PRODUCT CONFIGURATION

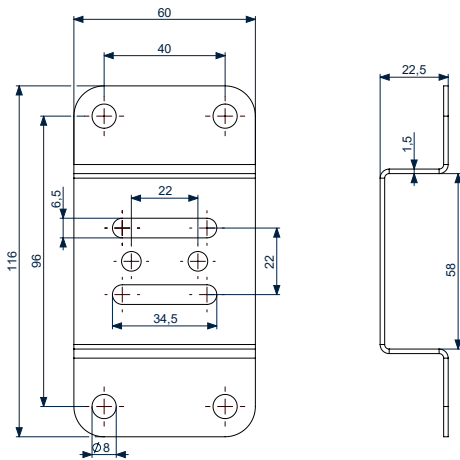
MODEL	MATERIAL	INLET CONFIGURATION		OUTLET PRESSURE		INLET CONNECTION		OUTLET CONFIGURATION		OPTIONS		GAS TYPE
HPI 723	Nickel-plated brass	Right	R	0 - 1 bar 0 - 15 psig	015	1/4" FNPT	000	1/4" FNPT	A	He leak cert. (inboard)	2	Please specify
HPI 743	Stainless steel			0 - 1,5 bar 0 - 21 psig	021	1/4" MNPT	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	
Other options upon request, please contact us								10 mm tube fitting	H	Stainless Steel Bonnet	SB	
								G3/8" RH	I			
								G3/8" LH	J			
								G1/4" RH	K			
For example:												
HPI 723			R		058		000		BE		2	

TECHNICAL DRAWING

Regulator:

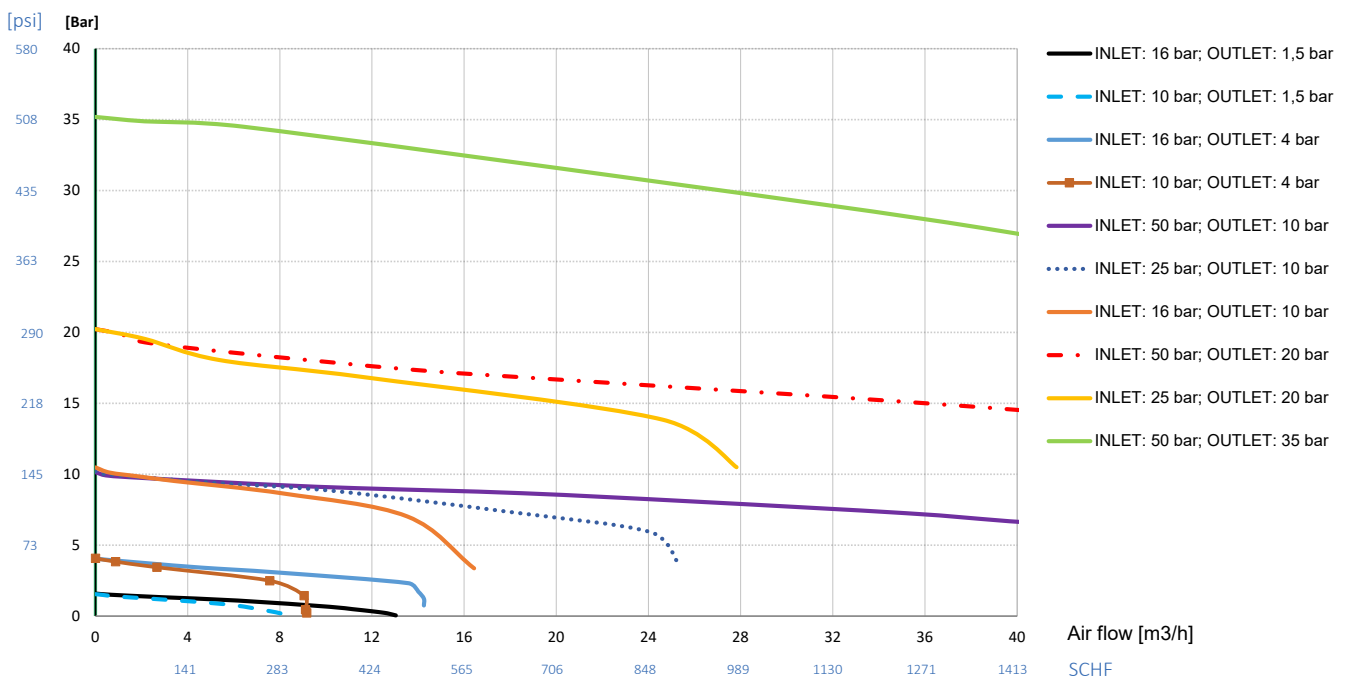


Wall bracket:



FLOW CHARTS

HPI 723/743



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

Harris Products Group
ul. Strefowa 8, 58-200 Dzierżonów, Poland
www.harrisproductsgroup.eu