

Cylinder regulators

HPI 100

High purity single stage barstock regulator

Model HPI 100 is a single stage cylinder regulator available in chrome plated brass (HPI 100C) or stainless steel (HPI 100S) barstock for pressure control of non-corrosive gases. Designed for applications where a slight rise in delivery pressure from full to empty cylinder can be tolerated.

APPLICATIONS:

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

FEATURES:

- Recommended for non-corrosive gases purity levels up to grade 6.0 (99.9999)
- 316L stainless steel diaphragm eliminates contamination from diffusion or outgassing
- HPI 100C - chrome plated body, bonnet and fittings
- HPI 100S - 316L stainless steel body, bonnet and fittings
- 1×10^{-9} mbar l/s He inboard helium leak rate to maintain gas purity levels
- 6 ports flexible configuration, 3 high pressure and 3 low pressure
- The 1/8" NPT thread on the bonnet venting for safety in 316L SS version;
- Maximum inlet pressure 300 bar (4350 psig)
- Cleaned for oxygen service

TECHNICAL DATA:

Type	Single stage
Purity	Up to 6.0
Inlet pressure	Max. 300 bar (4350 psi)
Outlet pressure	2/4/10/20 bar (29/58/145/290 psi)
Flow capacity	Cv = 0,07
Oxygen use	Suitable

MATERIALS:

Body, bonnet	316L stainless steel barstock or chrome plated brass barstock
Diaphragm	Hastelloy®*C276
Nozzle	316L stainless steel
Seat	PEEK
Seals O-ring	Viton®** (FKM)
Filter	SS 316L
Adjusting Knob	ABS plastic

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

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



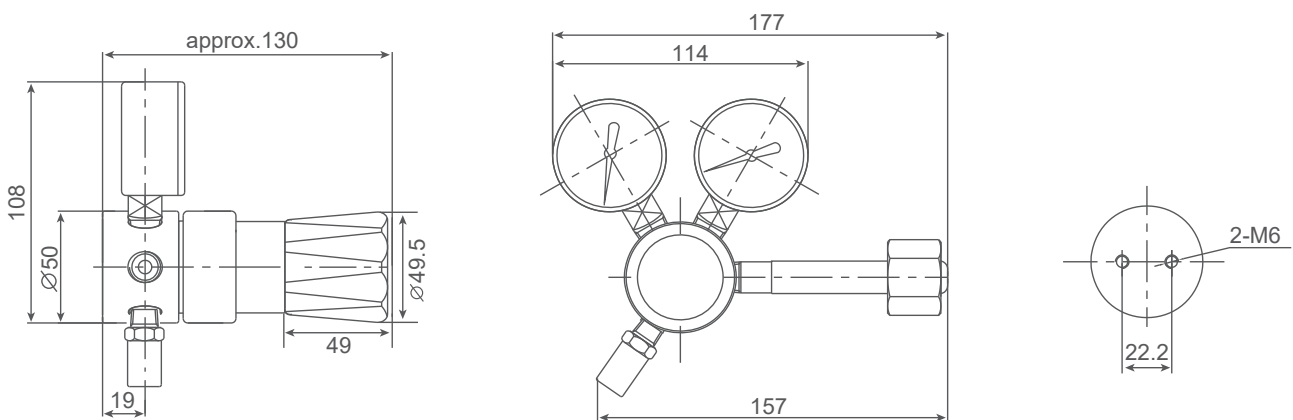
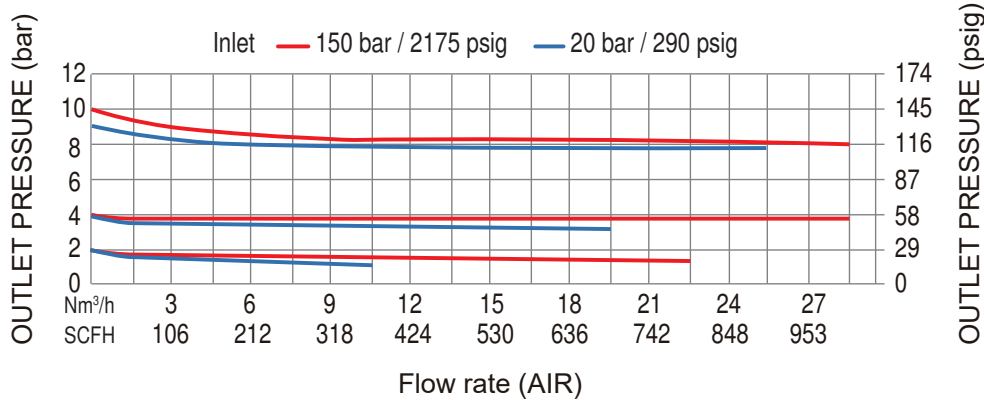
Model shown with additional accessories to be ordered separately

SPECIFICATIONS:

Inlet / outlet ports	1/4" FNPT
Weight	1,3 kg
Temperature range	-30°C to +74°C

FLOW CHART:

HPI 100



ORDERING INFORMATION:

MODEL	MATERIAL	INLET CONFIGURATION		OUTLET PRESSURE	INLET CONNECTION	OUTLET CONFIGURATION	OPTIONS	GAS TYPE	
HPI 100C	Chrome plated brass	Right	R	0 - 2 bar 0 - 29 psig	029 1/4" FNPT	000 1/4" FNPT	A He leak cert. (inboard)	2	
HPI 100S	Stainless steel	Left	L	0 - 4 bar 0 - 58 psig	058 DIN 477	1/4" FNPT diaph. valve	B	No gauges	3
				0 - 10 bar 0 - 145 psig	145 CGA	1/4" MNPT nipple	C	With relief valve	4
				0 - 20 bar 0 - 290 psig	290 AFNOR	1/4" tube fitting	D	He leak cert. (outboard)	5
					BS341	1/8" tube fitting	E	60 bar inlet gauge	6
					UNI	6 mm tube fitting	F		
					NBN NEN 3268	8 mm tube fitting	G		

For example:

HPI 100C R 145 DIN 6 BF 2 Ar

HPI 120

High purity - two-stage barstock regulator

Model HPI 120 is a two-stage cylinder regulator available in chrome plated brass (HPI 120C) or stainless steel (HPI 120S) barstock for pressure control of non-corrosive gases. Designed for constant delivery pressure from full to near empty cylinder conditions.

APPLICATIONS:

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

FEATURES:

- Recommended for non-corrosive gases purity levels up to grade 6.0 (99.9999)
- 316L stainless steel diaphragm eliminates contamination from diffusion or outgassing
- HPI 120C - chrome plated body, bonnet and fittings
- HPI 120S - 316L stainless steel body, bonnet and fittings
- 1×10^{-9} mbar l/s He inboard helium leak rate to maintain gas purity levels
- The 1/8" NPT thread on the bonnet venting for safety in 316L SS version
- Maximum inlet pressure 300 bar (4350 psig)
- Cleaned for oxygen service

TECHNICAL DATA:

Type	Two-stage
Purity	Up to 6.0
Inlet pressure	Max. 300 bar (4350 psi)
Outlet pressure	2/4/10/20 bar (29/58/145/290 psi)
Flow capacity	Cv = 0,07
Oxygen use	Suitable

MATERIALS:

Body, bonnet	316L stainless steel barstock or chrome plated brass barstock
Diaphragm	Hastelloy®*C276
Nozzle	316L stainless steel
Seat	PEEK
Seals O-ring	Viton®** (FKM)
Filter	SS 316L
Adjusting Knob	ABS plastic



Model shown with additional accessories to be ordered separately

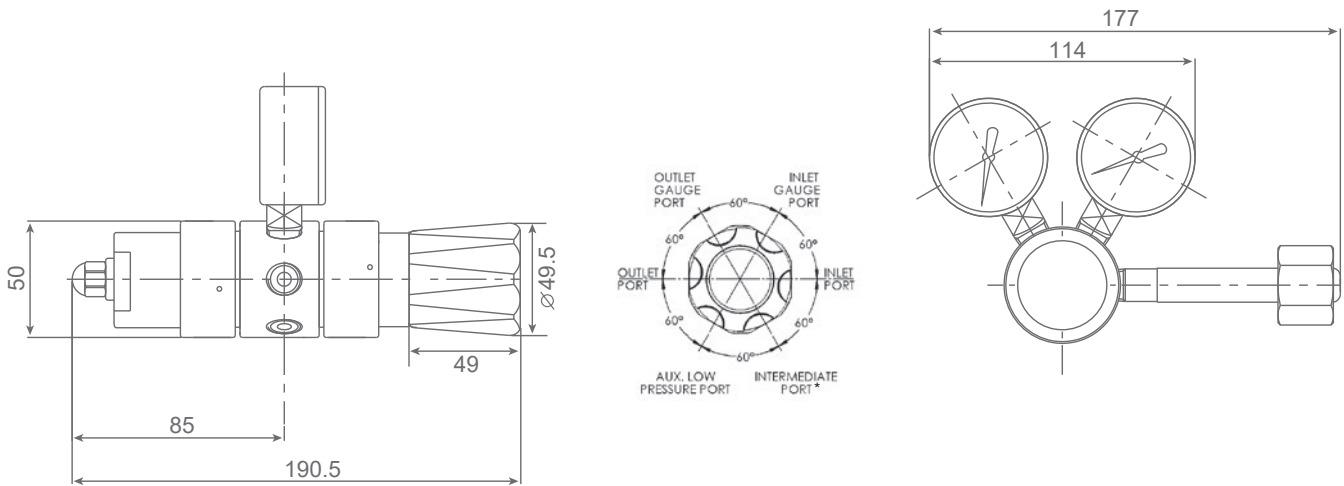
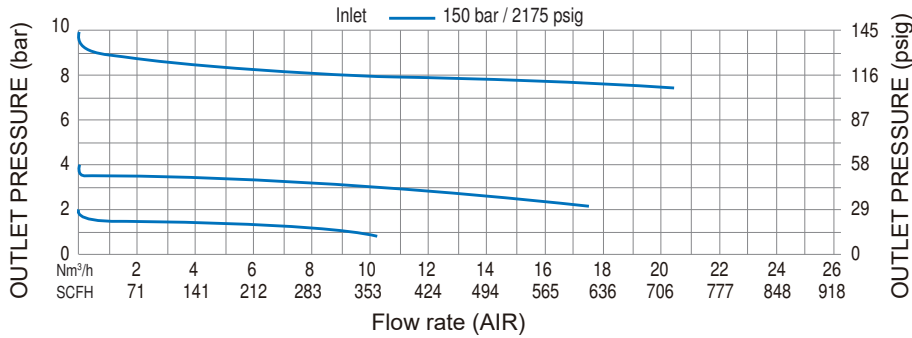
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** Viton® is a registered trademark of The Chemours Company

SPECIFICATIONS:

Inlet / outlet ports	1/4" FNPT
Weight	2,1 kg
Temperature range	-30°C to +74°C

FLOW CHART:

HPI 120



ORDERING INFORMATION:

MODEL	MATERIAL	INLET CONFIGURATION	OUTLET PRESSURE	INLET CONNECTION	OUTLET CONFIGURATION	OPTIONS	GAS TYPE
HPI 120C	Chrome plated brass	Right (only)	0 - 2 bar 0 - 29 psig	029 1/4" FNPT 000	1/4" FNPT	A With relief valve (intermediate port)	1 Please specify
HPI 120S	Stainless steel		0 - 4 bar 0 - 58 psig	058 DIN 477	1/4" FNPT diaph. valve	B He leak cert. (inboard)	2
			0 - 10 bar 0 - 145 psig	145 CGA	1/4" MNPT nipple	C No gauges	3
			0 - 20 bar 0 - 290 psig	290 AFNOR	1/4" tube fitting	D With relief valve (at low pressure side)	4
				BS341	1/8" tube fitting	E He leak cert. (outboard)	5
				UNI	6 mm tube fitting	F	
	NBN	8 mm tube fitting	G				
	NEN 3268						

For example:

HPI 120C R 058 DIN 6 000 BE 2 Ar

* Between 1 and 2 stage

HPI 300

High purity and high flow - single stage barstock cylinder regulator

Model HPI 300 is cylinder regulator available in chrome plated brass (HPI 300C) or stainless steel (HPI 300S) barstock for non-corrosive gases up to 300 bar (4350 psig) inlet pressure.

APPLICATIONS:

- Non-corrosive high flow gas applications
- Research sample systems gases
- Petrochemical industry
- Process analyzer gases
- Emission monitoring systems

FEATURES:

- Recommended for non-corrosive gases purity levels up to grade 6.0 (99.9999) and delivery pressures up to 35 bar (508 psig)
- 316L stainless steel diaphragm eliminates contamination from diffusion or outgassing
- HPI 300C - chrome plated body, bonnet and fittings
- HPI 300S - 316L stainless steel body, bonnet and fittings
- 1×10^{-9} mbar l/s He inboard helium leak rate to maintain gas purity levels
- 6 ports flexible configuration, 3 high pressure and 3 low pressure
- The 1/8" NPT thread on the bonnet venting for safety in 316L SS version
- Maximum inlet pressure 300 bar (4350 psig)
- Cleaned for oxygen service

TECHNICAL DATA:

Type	Single stage
Purity	Up to 6.0
Inlet pressure	Max. 300 bar (4350 psi)
Outlet pressure	2/4/10/20/35 bar (29/58/145/290/508 psi)
Flow capacity	Cv = 1,0
Oxygen use	Suitable

MATERIALS:

Body, bonnet	316L stainless steel barstock or chrome plated brass barstock
Diaphragm	Hastelloy®*C276
Nozzle	316L stainless steel
Seat	PEEK
Seals O-ring	Viton®** (FKM)
Filter	SS 316L
Adjusting Knob	ABS plastic



Model shown with additional accessories to be ordered separately

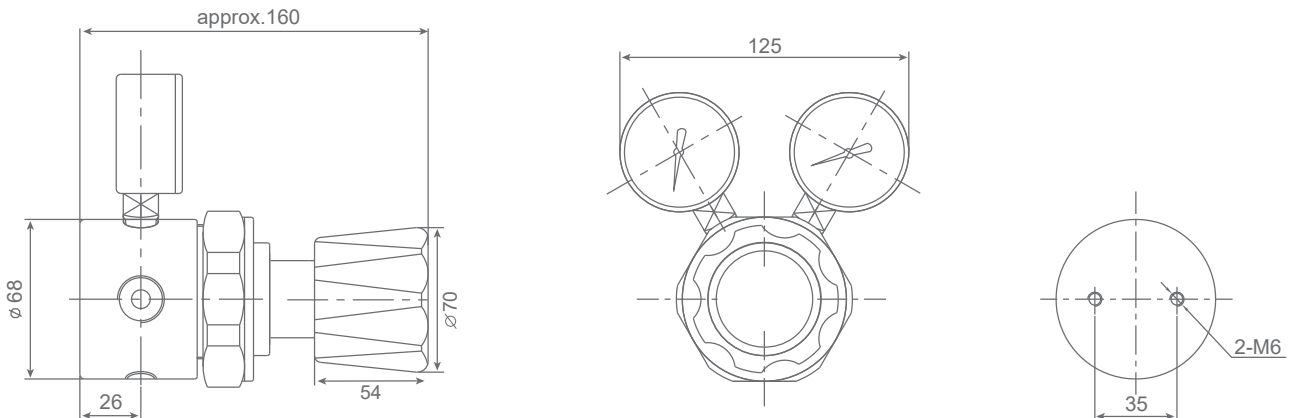
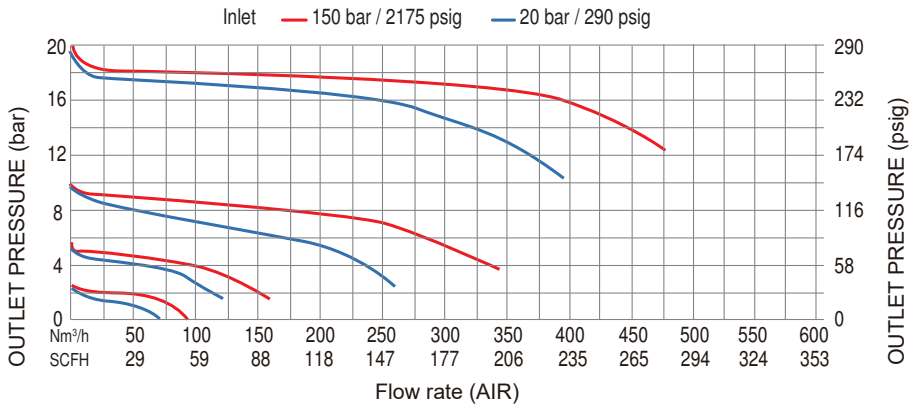
* Hastelloy® is a registered trademark name of Haynes International, Inc
** Viton® is a registered trademark of The Chemours Company

SPECIFICATIONS:

Inlet port	1/4" FNPT
Outlet port	1/2" FNPT
Gauges/Relief valve port	1/4" FNPT
Weight	2,7 kg
Temperature range	-30°C to +74°C

FLOW CHART:

HPI 300



ORDERING INFORMATION:

MODEL	MATERIAL	INLET CONFIGURATION	OUTLET PRESSURE	INLET CONNECTION	OUTLET CONFIGURATION	OPTIONS	GAS TYPE
HPI 300C	Chrome plated brass	Right R	0 - 2 bar 0 - 29 psig	029 1/4" FNPT	000 1/2" FNPT A	He leak cert. (inboard) 2	Please specify
HPI 300S	Stainless steel	Left L	0 - 4 bar 0 - 58 psig	058 DIN 477		No gauges 3	
			0 - 10 bar 0 - 145 psig	145 CGA		He leak cert. (outboard) 5	
			0 - 20 bar 0 - 290 psig	290 AFNOR			
			0 - 35 bar 0 - 508 psig	508 BS341			
				UNI			
				NBN			
				NEN 3268			

For example:

HPI 300C R 145 000 A 2 N₂

HPI 600

High purity and high pressure single stage cylinder regulator

The Model HPI 600 is a single stage barstock high pressure regulator that is designed to deliver high outlet pressure when used on high pressure cylinders up to 300 bar (4350 psig). Regulator is available in chrome plated brass (HPI 600C) or stainless steel (HPI 600S) barstock for pressure control of non-corrosive gases.

APPLICATIONS:

- Non-corrosive high pressure gas applications
- High pressure testing
- Charging accumulators
- Pressurizing aircraft struts

FEATURES:

- Recommended for non-corrosive gases purity levels up to grade 6.0 (99.9999)
- 316L stainless steel diaphragm eliminates contamination from diffusion or outgassing
- HPI 600C - chrome plated body, bonnet and fittings
- HPI 600S - 316L stainless steel body, bonnet and fittings
- 1×10^{-9} mbar l/s He inboard helium leak rate to maintain gas purity levels
- 6 ports flexible configuration, 3 high pressure and 3 low pressure
- The 1/8" NPT thread on the bonnet venting for safety in 316L SS version
- Maximum inlet pressure 300 bar (4350 psig)
- Cleaned for oxygen service

TECHNICAL DATA:

Type	Single stage
Purity	Up to 6.0
Inlet pressure	Max. 300 bar (4350 psi)
Outlet pressure	50/100/200 bar (720/1450/2900 psi)
Flow capacity	$C_v = 0,15$
Oxygen use	Suitable

MATERIALS:

Body, bonnet	316L stainless steel barstock or chrome plated brass barstock
Diaphragm	Hastelloy®*C276
Nozzle	316L stainless steel
Seat	PEEK
Seals O-ring	Viton®** (FKM)
Filter	SS 316L
Adjusting Knob	ABS plastic



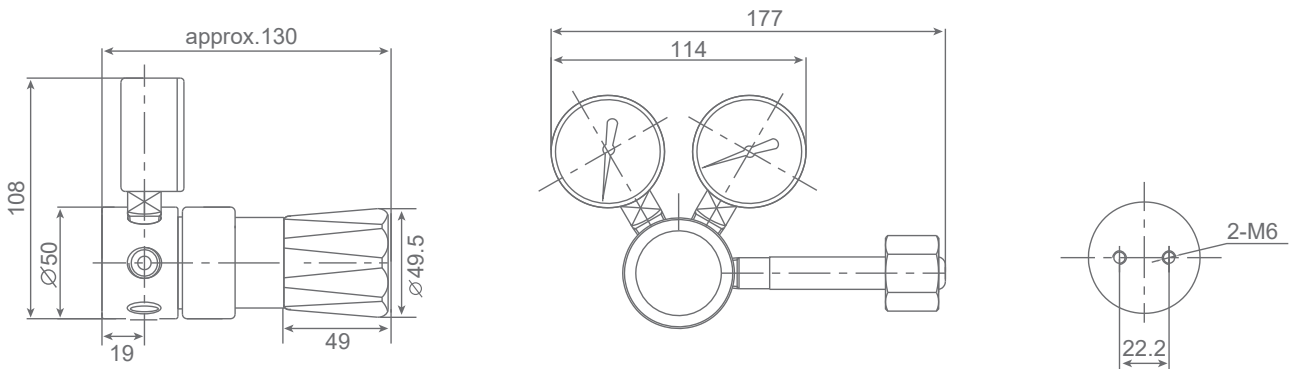
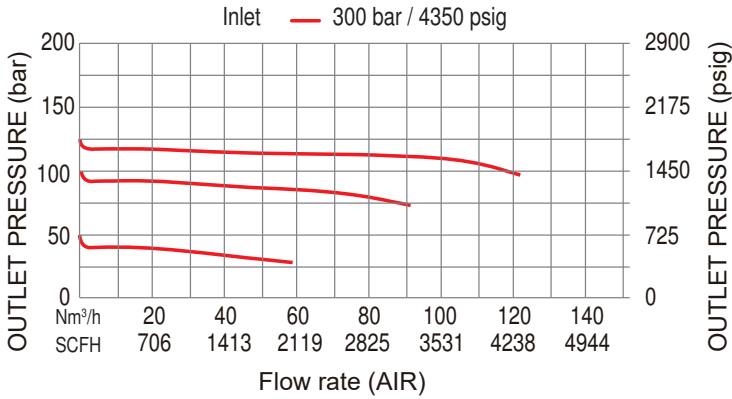
Model shown with additional accessories to be ordered separately

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SPECIFICATIONS:

Inlet port / outlet ports	1/4" FNPT
Weight	1,2 kg
Temperature range	-30°C to +74°C

FLOW CHART: HPI 600



ORDERING INFORMATION:

MODEL	MATERIAL	INLET CONFIGURATION	R	OUTLET PRESSURE	720	INLET CONNECTION	000	OUTLET CONFIGURATION	A	OPTIONS	GAS TYPE
HPI 600C	Chrome plated brass	Right (standard)	R	0 - 50 bar 0 - 720 psig	720	1/4" FNPT	000	1/4" FNPT	A	He leak cert. 2 (inboard)	Please specify
HPI 600S	Stainless steel	Left	L	0 - 100 bar 0 - 1450 psig	1450	DIN 477		1/4" tube fitting	D	No gauges	3
				0 - 200 bar 0 - 2900 psig	2900	CGA		6 mm tube fitting	F	He leak cert. 5 (outboard)	
				200 bar with 316L body only		AFNOR					
						BS341					
						UNI					
						NBN					
						NEN 3268					

For example:

HPI 600C R 720 000 A 2 Ar

HP 701

High purity - chrome plated brass regulator

Model HP 701 is a chrome plated single stage cylinder regulator with a stainless steel diaphragm for general laboratory use. The HP 701 can be used when a slight pressure rise from full to empty cylinder can be tolerated.

APPLICATIONS:

- Non-corrosive gases
- Vacuum control
- Purging
- Pressure testing
- Blanketing

FEATURES:

- Recommended for gas purity up to grade 5.0 (99.999)
- 302L stainless steel diaphragm eliminates contamination from diffusion or outgassing
- One-piece encapsulated seat design to protect seat from particulate contamination
- Chrome plated bonnet, body and fittings
- 1×10^{-8} mbar l/s He inboard helium leak rate to maintain gas purity levels
- Maximum inlet pressure 210 bar (3000 psig)

TECHNICAL DATA:

Type	Single stage
Purity	Up to 5.0
Inlet pressure	Max. 210 bar (3000 psig)
Outlet pressure	0-1/3,5/8,5/17 bar (15/50/125/250 psig)
Flow capacity	Cv = 0,17
Oxygen use	Suitable

MATERIALS:

Body	Chrome plated brass
Bonnet	Chrome plated die cast
Diaphragm	302 stainless steel
Nozzle	Brass
Seat	PTFE Teflon*
Seals	PTFE Teflon*
Filter	Nickel-plated sintered bronze - 10 micron
Seat	PH-17 stainless steel
Adjusting Knob	ABS plastic

SPECIFICATIONS:

Inlet / outlet ports	1/4" FNPT
Weight	1,6 kg

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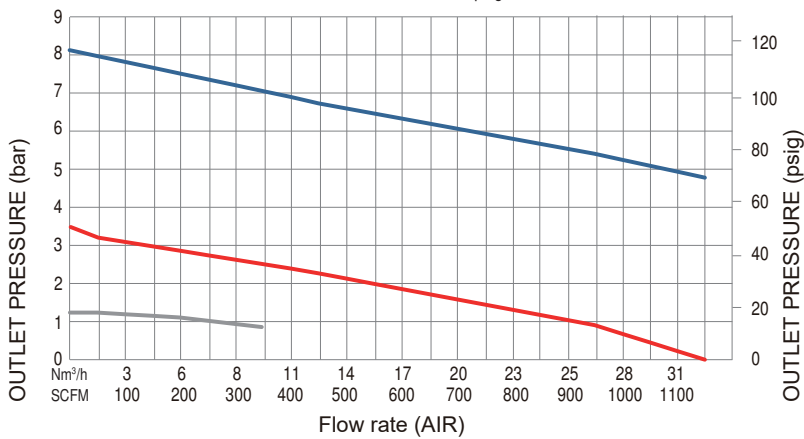


Model shown with additional accessories to be ordered separately

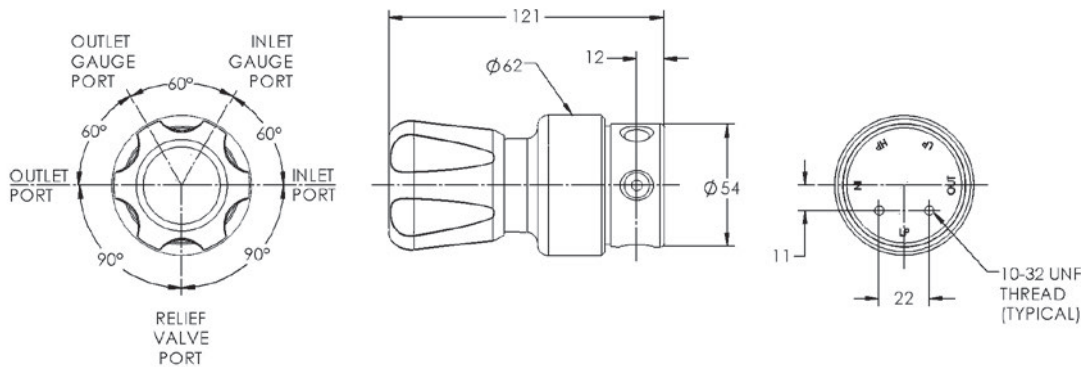
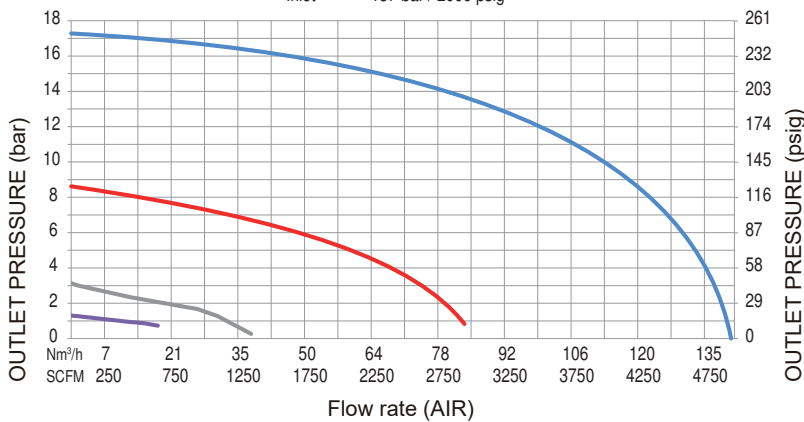
FLOW CHART:

HPI 701

Inlet — 13,7 bar / 200 psig



Inlet — 137 bar / 2000 psig



ORDERING INFORMATION:

MODEL	INLET CONFIGURATION	OUTLET PRESSURE	INLET CONNECTION	OUTLET CONFIGURATION	OPTIONS	GAS TYPE					
HP 701	Right	0 - 1 bar	015	1/4" FNPT	000	1/4" FNPT	A	He leak cert. (inboard)	2	Please specify	
		0 - 15 psig	050			1/4" FNPT diaph. valve	B	No gauges	3		
		0 - 3,5 bar	125			1/4" MNPT nipple	C	With relief valve	4		
		0 - 50 psig	250			1/4" tube fitting	D	He leak cert. (outboard)	5		
		0 - 8,5 bar				1/8" tube fitting	E	60 bar inlet gauge	6		
		0 - 125 psig				6 mm tube fitting	F				
		0 - 17 bar				8 mm tube fitting	G				
		0 - 250 psig									
						BS341					
						UNI					
						NBN					
						NEN 3268					
For example:											
HP 701		015	DIN 6		BF	2 Ar					

904

High Purity single stage gas Regulator

Model 904 is a chrome plated single stage cylinder regulator with a stainless steel diaphragm for general purposes application where high purity gas is required. The 904 can be used when a slight pressure rise from full to empty cylinder can be tolerated.

APPLICATIONS:

- Non-corrosive gases
- Purging
- Pressure testing
- Blanketing

FEATURES:

- Recommended purity levels of grade up to 5.0 (99.999%)
- External safety relief valve with 1/4" NPT female thread for external release hose connection
- 302 stainless steel diaphragm eliminates contamination from diffusion or outgassing
- One piece encapsulated seat design includes a sintered filter to protect the seat from particulate contamination
- Forged brass body fully chromed
- Chrome plated bonnet and fittings
- Capsule seat with Kel-F (CTFE) sealing surface
- Maximum inlet pressure 300 bar (4350 psig)

TECHNICAL DATA:

Type	Single stage
Purity	Up to 5.0
Inlet pressure	Max. 300 bar (4350 psig)
Outlet pressure	0-1,5/4/10 bar (21,75/58/145 psig)
Oxygen use	Suitable

MATERIALS:

Body	Chrome plated brass
Bonnet	ZnAl mold
Diaphragm	302 stainless steel
Nozzle	Brass
Seat	PTFE Teflon*
Seals	PTFE Teflon*
Filter	Sintered bronze - 10 micron
Adjusting Knob	ABS plastic

SPECIFICATIONS:

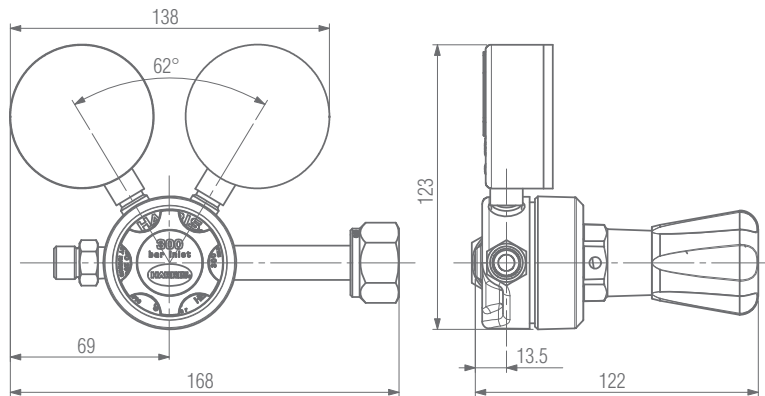
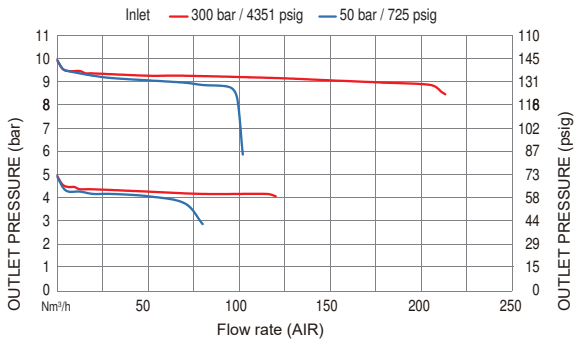
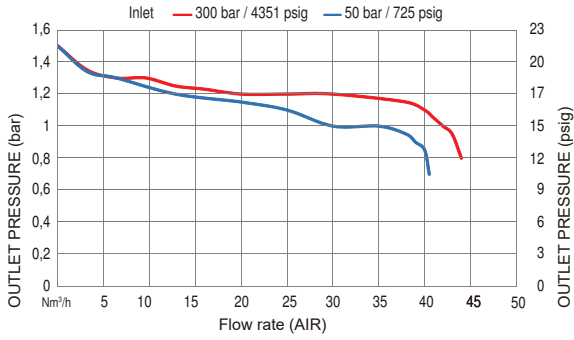
Inlet / outlet ports	1/4" FNPT
Weight	1,32 kg



Model shown with additional accessories to be ordered separately

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FLOW CHART: 904



MODEL NO.	GAS	MAX INLET PRESSURE (bar)	DELIVERY PRESSURE (bar)	MAX (AIR) FLOW (m³/h)	DELIVERY PRESSURE GAUGE (bar)	SUPPLY PRESSURE GAUGE (bar)
904D-1.5*	Argon, CO ₂ , nitrogen, air, helium, hydrogen, oxygen, methane	300	0-1,5	24	0-2,5	0-400
904D-4*			0-4	48	0-6	
904D-10*			0-10	100	0-16	
904R-1.5*			0-1,5	24	0-2,5	
904R-4*			0-4	48	0-6	
904R-10*			0-10	100	0-16	

ORDERING INFORMATION:

MODEL	INLET CONFIGURATION	OUTLET PRESSURE	INLET CONNECTION	OPTIONS	GAS TYPE
904	Right	0 - 1,5 bar 0 - 21,75 psig 0 - 4 bar 0 - 58 psig 0 - 10 bar 0 - 145 psig	021 058 145 AFNOR BS341 UNI NBN NEN 3268	000 IRV Diaphragm safety relief valve External safety relief valve He leak cert. (inboard) He leak cert. (outboard)	Please specify D R 2 5

For example:

904 058 DIN 6 2 Ar