# **Line regulators**

# HPI 100L High purity - single stage line regulator

Model HPI 100L is a line regulator available in chrome plated brass (HPI 100LC) or stainless steel (HPI 100LS) barstock, for pipeline and other applications up to 40 bar (580 psig) inlet pressure.

#### **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 100LC chrome plated body, bonnet and fittings
- HPI 100LS 316L stainless steel body, bonnet and fittings
- 1x10-9 mbar I/s He inboard helium leak rate to maintain gas purity levels
- 4 ports flexible configuration
- The 1/8" NPT thread on the bonnet venting for safety in 316L SS version
- Maximum inlet pressure 40 bar (580 psig)
- Cleaned for oxygen service

# TECHNICAL DATA:

Туре	Single stage
Purity	Up to 6.0
Inlet pressure	Max. 40 bar (580 psi)
Outlet pressure	2/4/10/20 bar (29/58/145/290 psi)
Flow capacity	Cv = 0.18
Oxygen use	Suitable

#### **MATERIALS:**

316L stainless steel barstock or chrome plated brass barstock
Hastelloy®*C276
316L stainless steel
PEEK
Viton®** (FKM)
SS 316L
ABS plastic

<sup>\*</sup> Hastelloy® is a registered trademark name of Haynes International, Inc



Model shown with additional accessories to be ordered separately

#### RELATED OPTIONS:

Wall mounting bracket: HPI-L-BPB

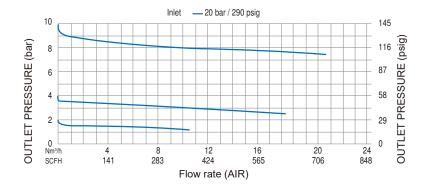


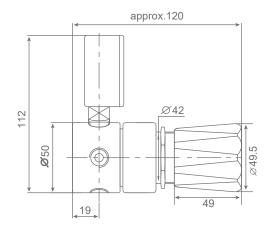


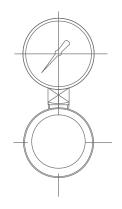
<sup>\*\*</sup> Viton® is a registered trademark of The Chemours Company

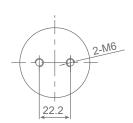
Inlet / outlet ports	1/4" FNPT
Weight	1,04 kg
Temperature range	-30°C to +74°C

# FLOW CHART: HPI 100L









# ORDERING INFORMATION:

N	<b>NODEL</b>	MATERIAL	INLET CONFIGURAT	ION	OUTLET PRESSURE		INLET CONNECTION		OUTLET CONFIGURATIO	N	OPTIONS		GAS TYPE
ŀ	IPI 100LC	Chrome plated brass	Right	R	0 - 2 bar 0 - 29 psig	029	1/4" FNPT	000	1/4" FNPT	Α	He leak cert. (inboard)	2	Please specify
H	IPI 100LS	Stainless steel	Left	L	0 - 4 bar 0 - 58 psig	058	1/4" MNPT	001	1/4" FNPT diaph. valve	В	No gauges	3	
					0 - 10 bar 0 - 145 psig	145	1/4" tube fitting	002	1/4" MNPT nipple	С	With relief valve	4	
					0 - 20 bar 0 - 290 psig	290	6 mm tube fitting	003	1/4" tube fitting	D	He leak cert. (outboard)	5	
							8 mm tube fitting	004	1/8" tube fitting	E	Wall mounting Bracket	Р	
									6 mm tube fitting	F			
									8 mm tube fitting	G			

For example:

HPI 100LC R 058 DIN 6 BE 2 Ar



# ■ HPI 300L

## **High purity and high flow – single stage barstock line regulator**

Model HPI 300L is in-line manifold regulator available in chrome plated brass (HPI 300LC) or stainless steel (HPI 300LS) barstock, for pipeline and other applications of non-corrosive gases up to 100 bar (1450 psig) inlet pressure.

#### APPLICATIONS:

- Non-corrosive high flow gas applications
- High purity gas applications
- Bulk gas distribution systems
- Laser gas systems
- Process analyzer gases
- Research sample systems gases
- Petrochemical industry
- Emission monitoring systems

#### FEATURES:

- Recommended for non-corrosive gases purity levels up to grade 6.0 (99.9999) and delivery pressures up to 50 bar (725 psig)
- 316L stainless steel diaphragm eliminates contamination from diffusion or outgassing
- HPI 300LC chrome plated body, bonnet and fittings
- HPI 300LS 316L stainless steel body, bonnet and fittings
- 1x10<sup>-9</sup> mbar I/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 100 bar (1450 psig)
- Cleaned for oxygen service

#### TECHNICAL DATA:

Type	Single stage
Purity	Up to 6.0
Inlet pressure	Max. 100 bar (1450 psi)
Outlet pressure	2/4/10/20/35/50 bar (29/58/145/290/507/725 psi)
Flow capacity	Cv = 1,7
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 0-ring	Viton®** (FKM)
Filter	SS 316L
Adjusting Knob	ABS plastic

#### SPECIFICATIONS:

Inlet / outlet ports	1/2" FNPT
Other ports	1/4" FNPT
Weight	2,8 kg
Temperature range	-30°C to +74°C

<sup>\*</sup> Hastelloy® is a registered trademark name of Haynes International, Inc



Model shown with additional accessories to be ordered separately

#### RELATED OPTIONS:

Wall mounting Bracket: HPI-L-BPB

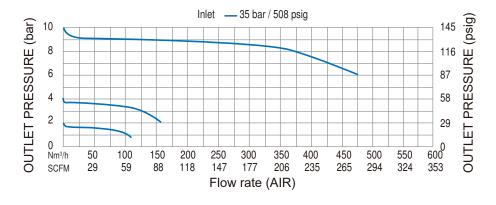


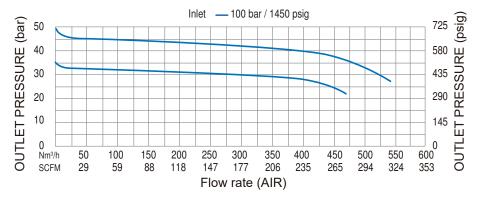


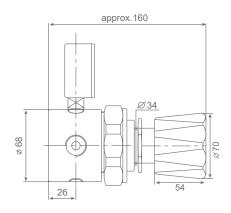
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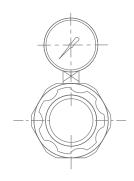
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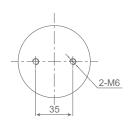
#### **HPI 300L**











## **ORDERING INFORMATION:**

MODEL	MATERIAL	INLET CONFIGURAT	ION	OUTLET PRESSURE		INLET CONNECTION		OUTLET CONFIGURA	TION	OPTIONS		GAS TYPE
HPI 300LC	Chrome plated brass	Right	R	0 - 2 bar 0 - 29 psig	029	1/2" FNPT	000	1/2" FNPT	Α	He leak cert. (inboard)	2	Please specify
HPI 300LS	Stainless steel	Left	L	0 - 4 bar 0 - 58 psig	058					No gauges	3	
				0 - 10 bar 0 - 145 psig	145					He leak cert. (outboard)	5	
				0 - 20 bar 0 - 290 psig	290					Wall mounting Bracket	Р	
				0 - 35 bar 0 - 507 psig	507							
				0 - 50 bar 0 - 725 psig	725							
For example	9:											
HPI 300LC			R		507		000		Α		2	$N_2$



#### ■ HPI 600L

## High purity and high pressure - single stage barstock line regulator

The Model HPI 600L is a single stage high pressure line regulator that is designed to deliver high outlet pressures when used on high pressure cylinders up to 300 bar (4350 psig). Regulator is available in chrome plated brass (HPI 600LC)

or stainless steel (HPI 600LS) 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
- 316L stainless steel diaphragm eliminates contamination from diffusion or outgassing
- HPI 600LC chrome plated body, bonnet and fittings
- HPI 600LS 316L stainless steel body, bonnet and fittings
- 1x10<sup>-9</sup> mbar I/s He inboard helium leak rate to maintain gas purity levels
- 4 ports flexible configuration, one high pressure and three 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

Model shown with additional accessories to be ordered separately

#### **TECHNICAL DATA:**

Туре	Single stage
Purity	Up to 6.0
Inlet pressure	Max. 300 bar (4350 psi)
Outlet pressure	50/100/200 bar (725/1450/2900 psi)
Flow capacity	Cv = 0.15
Oxygen use	Suitable

#### MATERIALS:

Diaphragm	Hastelloy®*C276
Nozzle	316L stainless steel
Seat	PEEK
Seals 0-ring	Viton®** (FKM)
Filter	SS 316L
Adjusting Knob	ABS plastic

#### RELATED OPTIONS:

Wall mounting bracket: HPI-L-BPB



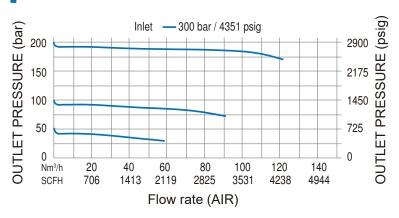


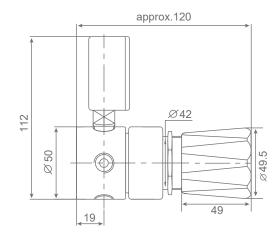
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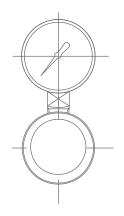
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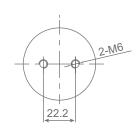
Inlet / outlet ports	1/4" FNPT
Weight	1,13 kg
Temperature range	-30°C to +74°C

## FLOW CHART: HPI 600L









## **ORDERING INFORMATION:**

MODEL	MATERIAL	INLET CONFIGURATION	OUTLET PRESSURE		INLET CONNECTION	ON	OUTLET CONFIGURATIO	N	OPTIONS		GAS TYPE
HPI 600LC	Chrome plated brass	Right R	0 - 50 bar 0 - 725 psig	725	1/4" FNPT	000	1/4" FNPT	Α	He leak cert. (inboard)	2	Please specify
HPI 600LS	Stainless steel	Left L	0 - 100 bar 0 - 1450 psig	1450	1/4" tube fitting	002	1/4" tube fitting	D	No gauges	3	
			0 - 200 bar 0 - 2900 psig	2900	6 mm tube fitting	003	6 mm tube fitting	F	He leak cert. (outboard)	5	
			200 bar with 316L body only						Wall mounting Bracket	Р	

For example:

HPI 600LC R 720 000 A 2  $\rm N_2$ 



## ■ HPI 400L

## High purity and ultra-high flow - single stage barstock regulator

Model HPI 400L is a high flow regulator.

In-line manifold regulator available in chrome plated brass (HPI 400LC) or stainless steel (HPI 400LS) barstock for pipeline and other applications of non-corrosive gases up to 40 bar (580 psig) inlet pressure.

#### APPLICATIONS:

- Non-corrosive high flow gas applications
- Laser assist gases
- Pressure transfer
- Blanketing & high flow manifolds
- Bulk gas distribution systems
- Pharmacy industry
- Food industry
- Petrochemical industry

#### FEATURES:

- Recommended for non-corrosive gases purity levels up to grade 6.0 (99.9999) and delivery pressures up to 20 bar (290 psig)
- Low pressure and high flow regulator
- Nylon reinforced diaphragm
- HPI 400LC chrome plated body, bonnet and fittings
- HPI 400LS 316L stainless steel body, bonnet and fittings
- 1x10<sup>-4</sup> mbar I/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 40 bar (290 psig)
- Cleaned for oxygen service

## TECHNICAL DATA:

Туре	Single stage
Purity	Up to 6.0
Inlet pressure	Max. 40 bar (580 psi)
Outlet pressure	2/4/10/20 bar (29/58/145/290 psi)
Flow capacity	Cv = 5,1
Oxygen use	Suitable

#### MATERIALS:

Body, bonnet	316L stainless steel barstock or chrome plated brass barstock
Diaphragm	Nylon reinforced
Nozzle	316L stainless steel
Seat	Buna-N
Adjusting Knob	Aluminium

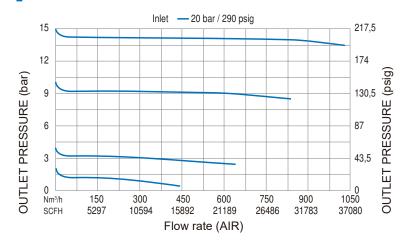


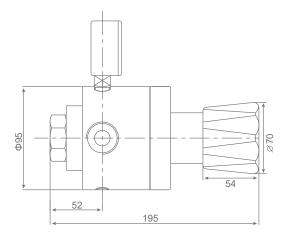
Model shown with additional accessories to be ordered separately

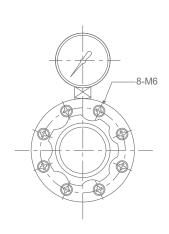


Inlet / outlet ports	1" FNPT
Other ports	1/4" FNPT
Weight	4,1 kg
Temperature range	-15°C to +74°C

## FLOW CHART: HPI 400L







# ORDERING INFORMATION:

MODEL	MATERIAL	INLET CONFIGURATION	OUTLET PRESSURE		INLET CONNECTION		OUTLET CONFIGURATION	N	OPTIONS		GAS TYPE
HPI 400LC	Chrome plated brass		0 - 2 bar 0 - 29 psig	029	1" FNPT	000	1" FNPT	Α	He leak cert. (inboard)	2	Please specify
HPI 400LS	Stainless steel	Left L	0 - 4 bar 0 - 58 psig	058					No gauges	3	
			0 - 10 bar 0 - 145 psig	145					He leak cert. (outboard)	5	
			0 - 20 bar 0 - 290 psig	290							

For example:

HPI 400LC R 145 000 A 2  $N_2$ 



## ■ HPI 500L

# **High purity – back pressure line regulator**

Model HPI 500L is a line regulator available in chrome plated brass (HPI 500LC) or stainless steel (HPI 500LS) barstock for protection pipeline against high pressure (function similar to relief valve).

#### APPLICATIONS:

- Line protection against high pressure
- Component testing
- Calibration systems
- Laboratory pressure control
- High pressure sampling systems
- Service & test equipment

#### FEATURES:

- Recommended for non-corrosive gases purity levels up to grade 6.0 (99.9999)
- Available for air, nitrogen or hydrogen gas service
- 316L stainless steel diaphragm eliminates contamination from diffusion or outgassing
- HPI 500LC chrome plated body, bonnet and fittings
- HPI 500LS 316L stainless steel body, bonnet and fittings
- 1x10<sup>-9</sup> mbar l/s He inboard helium leak rate to maintain gas purity levels
- 3 ports flexible configuration
- Maximum inlet pressure 80 bar (1160 psig)
- Cleaned for oxygen service



Туре	Single stage
Purity	Up to 6.0
Inlet pressure	Max. 80 bar (1160 psi)
Outlet pressure	2,5 – 10 bar (36 – 145 psi) 10 – 50 bar (145 – 725 psi) 50 – 80 bar (725 – 1160 psi)
Flow capacity	Cv = 0.10
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 0-ring	Viton®** (FKM)
Filter	SS 316L
Adjusting Knob	ABS plastic

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Model shown with additional accessories to be ordered separately

#### RELATED OPTIONS:

Wall mounting bracket: HPI-L-BPB

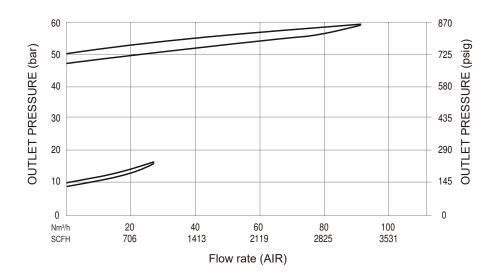


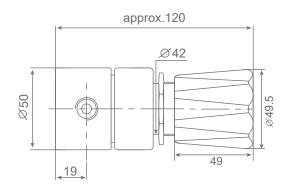


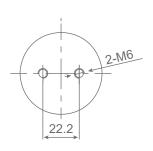
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Inlet / outlet ports	1/4" FNPT
Weight	1,13 kg
Temperature range	-30°C to +74°C

# FLOW CHART: HPI 500L







# ORDERING INFORMATION:

MODEL	MATERIAL	INLET CONFIGURATION	CONTROLLED PRESSURE RANG	iE	INLET CONNECTION	OUTLET CONFIGURA	ATION	OPTIONS		GAS TYPE
HP 500LC	Chrome plated brass	Right R (standard)	2,5 - 10 bar 1 36,25 - 145 psig	145	1/4" FNPT 000	1/4" FNPT	Α	He leak cert. (inboard)	2	Please specify
HP 500LS	Stainless steel		10 – 50 bar 7 145 – 725 psig	725				No gauges	3	
			50 – 80 bar 1 725– 1160 psig	1160				He leak cert. (outboard)	5	
								Wall mounting Bracket	Р	

For example:

HPI 500LC R 145 000 A 2  $N_2$ 

