

DOME PRESSURE REGULATOR SET 747 LE/S

Complete solution, own-medium controlled



High performance dome-loaded pressure regulator set.
For high and varying flows requiring maximum pressure stability.

Features

- **Pilot Control Tube (PCT)**
One of the features enabling highly accurate control of outlet pressure
- **Balanced Seat Design (BSD)**
Further enabling control precision, high reliability and low maintenance
- **A complete solution, ready to use**
With integrated pilot pressure regulator, and stainless steel pressure gauges, completely assembled and tested
- **Own-medium controlled**
Enabling autonomous operation (no separate gas supply required)
- **Closed system**
Self-relieving design, but no gas is released to atmosphere
- **Simple to install and operate**
Removable spindle enables simple setting of the required outlet pressure
Can be positioned at any angle / orientation
For indoor and outdoor installation.
- Glycerine-filled manometer, unfilled version for oxygen

Operation / Usage

Ideal for process gas supply where pressure accuracy is required even when inlet pressures and flow rates are varying.

High flow rates and outlet pressure accuracy are achieved, even when the difference between inlet and outlet pressures is small.

Maintenance

Depending on application, moving wetted parts may need replacement every 1-3 years.

For this we offer our Maintenance Set with original spare parts.

Options

- Lockable spindle cap
- Maintenance Set

Approvals

Company certified according to ISO 9001, ISO 22000 and PED 2014/68/EU Module H

CE-marked according to PED 2014/68/EU

ATEX 2014/34/EU with ignition hazard analysis according to EN 1127-1, DIN EN 13463-1 and ZH1/200

Analysed for Food Safety per HACCP-Analysis

Fulfils the requirements of EU Regulations (EC) 1935/2004, and (EC) 2023/2006

Fulfils the requirements of German Food and Feed (LFGB) Law, and is suitable for contact with food gases

Available upon request

Certificates and test reports

Other Dome types

Switchover systems / parallel supply systems

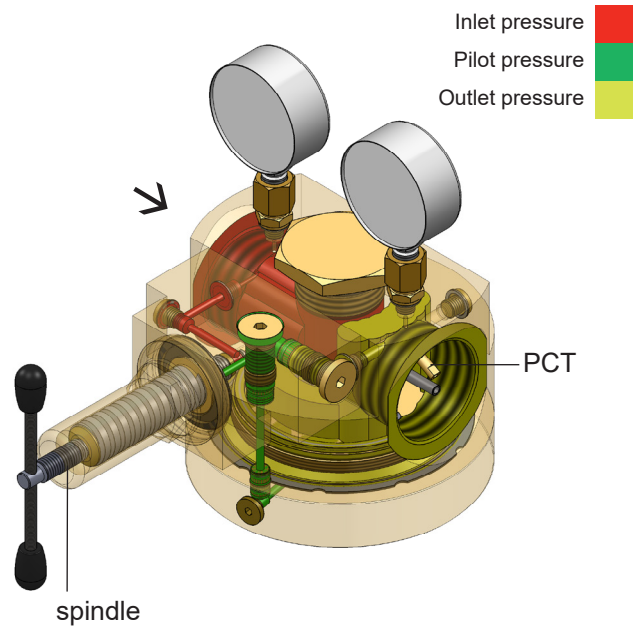
Customer-specific / customised versions

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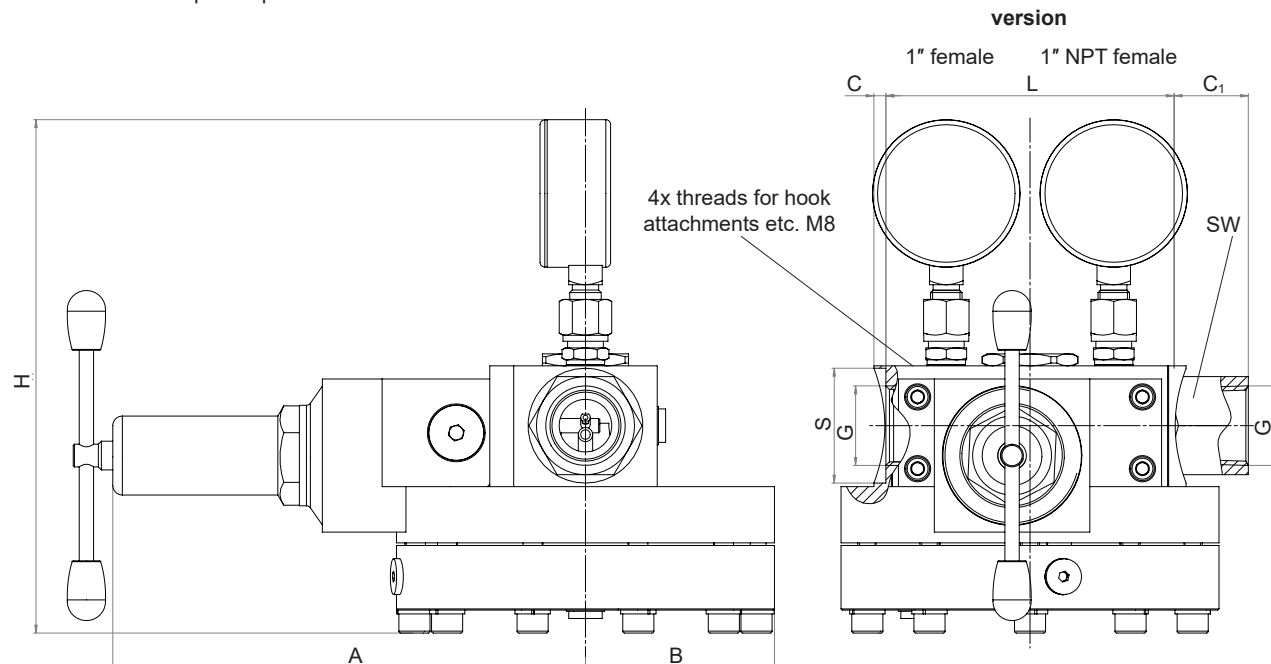
	Model		
	747LE/S		
Max. inlet pressure	CO ₂ 25 bar 363 PSI	O ₂ 30 bar 435 PSI	other gases 40 bar 580 PSI
Outlet pressure	0.5 - 10 bar 7 - 145 PSI		
	0.5 - 16 bar 7 - 232 PSI	0.5 - 30 bar 7 - 435 PSI	0.5 - 30 bar 7 - 435 PSI
Connections	G 1 female 1" NPT female		
Kv-Value	3.6		
Cv-Value	4.2		
Coefficient as per DIN EN ISO 7291	Coefficient of increase in pressure after closing R = 0.01		
	Coefficient of unevenness I = 0.01		
Temperature range	-30 °C to +50 °C -22 °F to +122 °F		
Housing	Brass		
Cartridge	Stainless steel (1.4305)		
Membrane	CR		
O-Ring	NBR		
Spring	Stainless steel (1.4310)		
Pressure gauge	Stainless steel housing DIN EN ISO 5171 for O ₂ , DIN EN 837-1 glycerine-filled for other gases		
Weight approx.	14 kg / 31 lb		



other material (material combinations) upon request

Model	Connection G	Dimensions in mm							
		A	B	C	C ₁	H	L	S	SW
747	1" female	197.6	79	5	-	approx. 215	120.5	48	-
	1" NPT female	197.6	79	5	31	approx. 215	182.5 (L+2xC ₁)	48	41

other connections upon request



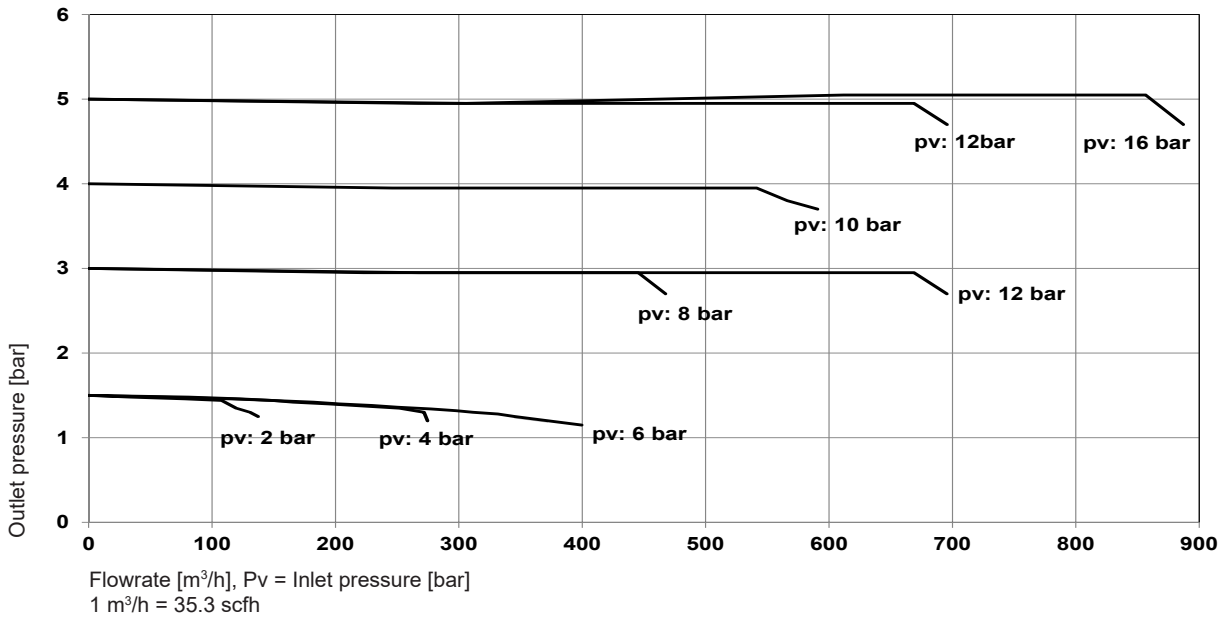
For more pressure regulators visit www.domepressureregulators.com

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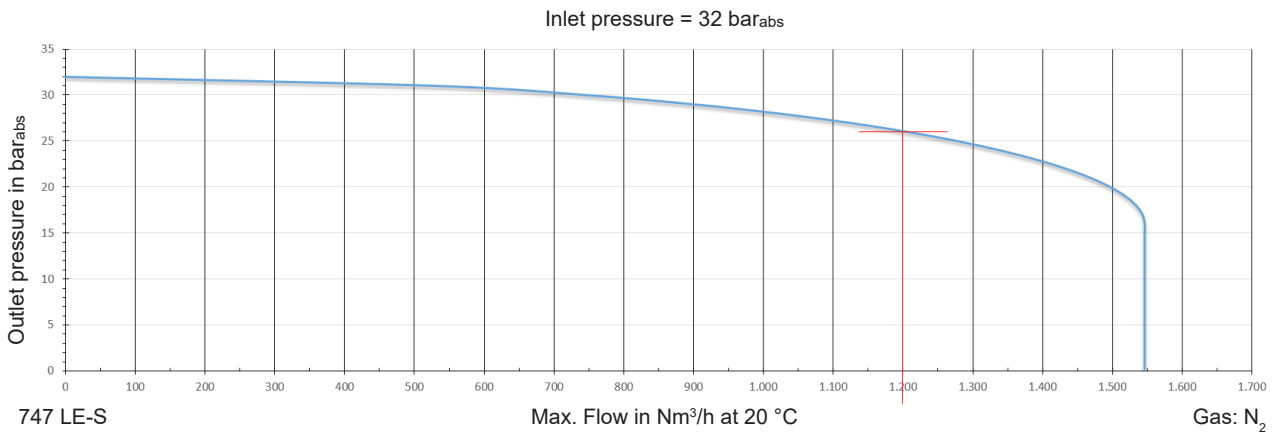
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Pressure control performance examples (N₂, 20 °C : apply conversion factor of x 0.8 for CO₂)



Flow capacity “envelope“



Example:

Inlet pressure: 32 bar_{abs}
 Outlet pressure: 26 bar_{abs}
 Max. Flow: 1,200 Nm³/h
 Gas: N₂

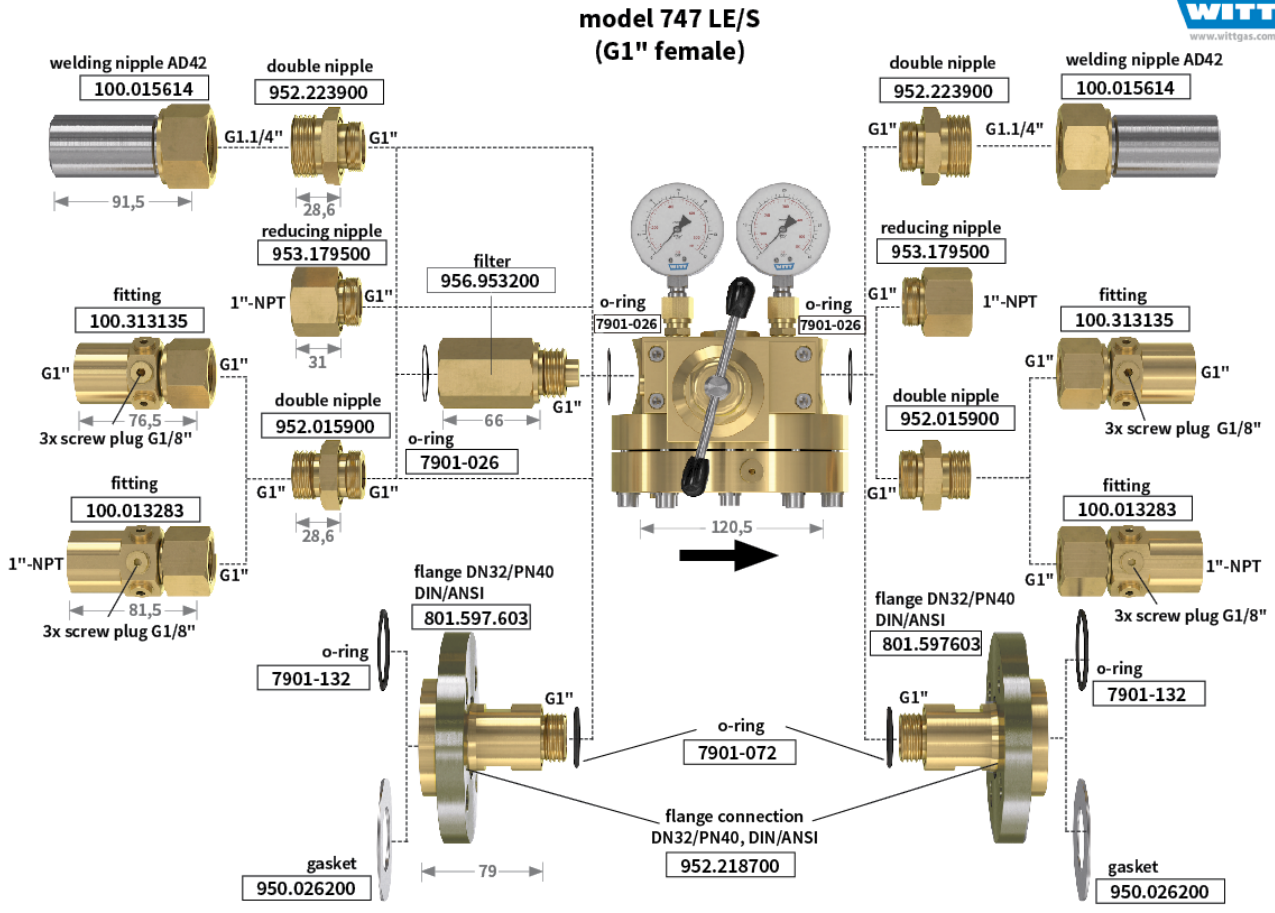
individual graphs with your parameters upon request

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Connection combinations



Maintenance Set	
Model	Order-No.
747LE/S	962.000067

lockable spindle cap	
Model	Order-No.
747LE/S	966.061400

