

BP2403 NEW

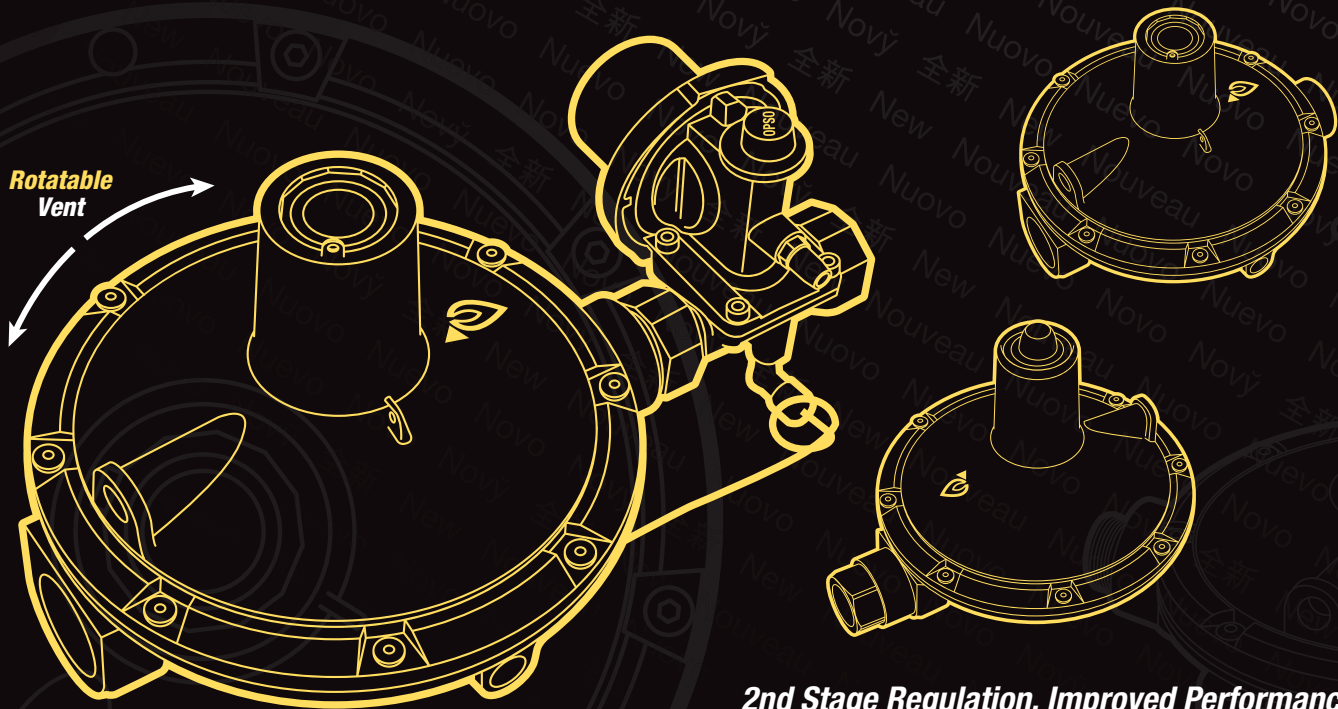
Low Pressure Regulator up to 70 kg/h

BP2403 - BP2403R - BP2403 OPSO - BP2403 UPSO - BP2403 OPSO/UPSO

Features

Large range of regulators
Capacity up to 70 kg/h (970 kW)
Rotatable Vent
Inlet pressure from 0.05 to 8 bar

Installer and customer friendly:
Easy installation / Safety devices
and adjustment options



2nd Stage Regulation, Improved Performance, Installation and Safety Features

BP2403
001105CA



BP2403R
001111CD



BP2403 OPSO
006840CB



BP2403 UPSO
001120CB



Versatile economic pressure regulator supplying high capacity flow rates at both low and high inlet pressure ranges. Mainly used in medium and large power installations (domestic metered networks, commercial, agricultural or industrial) as final stage or intermediate stage pressure reduction.

Suitable for all types of LPG, natural gas, synthetic natural gas (SNG) or other non aggressive gases (air, nitrogen, biomethane).

Wide range, choose from both standard range listed or bespoke specialist models for more complex applications - choose the features accordingly

- ✓ low pressure - final pressure reduction normally 21, 30, 37, 75, and up to 100 mb
- ✓ 3rd stage regulation with inlet pressure below 500 mb
- ✓ intermediate pressure regulation supplying 150 mb to 350 mb

BP2403 Standard models used in commercial and industrial applications engineer settable.

BP2403R Variable pressure models which require regular or fine tuning of pressure adjustment for industrial processes.

BP2403 - UPSO/OPSO models offer security features for additional safety, protecting downstream installations from either over pressure or under pressure situations.

Models listed can contain one or more feature.



FEATURES

High capacity and excellent pressure control with internal regulation system based on:

- ✓ direct operated, spring loaded, mechanism
- ✓ 9,6 mm seat diameter,
- ✓ HNBR highly resilient valve seat pad
- ✓ large reinforced diaphragm,

Stable pressure control is achieved and consistent in all conditions of temperature, capacity and inlet pressure operating in the normal range of the regulator. Meeting the manufacturing and performance standard EN16129 where applicable.

Adjustable regulated pressure models

The outlet regulated pressure is pre-set at nominal values and may be adjusted, in use, according to table "Product Range".

Variable pressure models

Wide operating range of pressures on these models come with optional T-bar and locking nut handle, providing convenient user adjustment from the minimum value up to the maximum value pressures (see product range).

Connections

The gas connection, available as standard :

- ✓ Inlet : Rc 3/4" ISO 7 - 3/4" NPT - NUT M20x1,5RH,
- ✓ Outlet : Rc 1" ISO 7 or 1" NPT,

Convenient for most gas installers, offering generous pipe diameter connection for low pressure drop in installation pipework.

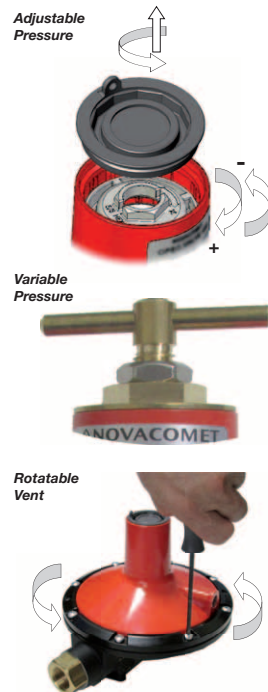
Vent orientation - New "Rotatable Vent"

Breather vent orientation, made easy by the new design of Rotatable Vent cover to ensure water is prevented from entering and/or accumulating in the regulator, either by rain, humidity or condensation. The operation can be carried out on site by a qualified engineers.

- 1 unscrew one by one the 8 screws,
- 2 rotate and orientate the regulator cover with vent downward oriented,
- 3 Redo the 8 screws alternately again and fit the plastic anti-tamper seal supplied.
- 4 Make a leak test to ensure everything is OK and the Rotatable Vent cover is sealed

Pressure Setting sealing

On some models provision to seal internal adjustable pressure settings onto using the regulator cap is now available where specified.



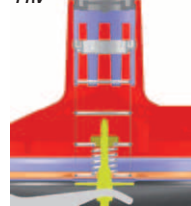
OPSO



UPSO



PRV



Connectable Vent



Label Marking

	NOVACOMET BP2403
	(0,3) 0,5+2 bar (06/17)
	30 mbar G.23/H.19
	(40) 50 kg/h LPG - (552) 690 kW
	PRV 75mbar EN16129

OPERATIONAL DESIGN

Safety Device (OPSO / UPSO / PRV) OPSO safety (Over Pressure Shut Off)

- ✓ BP2403 regulators can be fitted with a safety OPSO block which interrupts the flow of gas upstream in case of over pressure. The intervention OPSO value is factory pre-set,
- ✓ OPSO safety has a visual indicator and testing point for a pipe 8mm diameter,
- ✓ Easily re-settable,
- ✓ Possible sealing means to prevent from any improper reset.

UPSO safety (Under Pressure Shut Off)

- ✓ Certain models are equipped with an UPSO safety device which interrupts the flow of gas in case of low pressure: UPSO (Under Pressure Shut Off) generated by interruption of upstream gas supply, excessive gas consumption, gas supply pipe obstruction. The intervention UPSO value is factory preset.
- ✓ UPSO safety has a visual indicator and test point,
- ✓ Easily resettable.

PRV safety

- ✓ BP2403 regulators can be manufactured with an internal Pressure Relief Valve (PRV) that allows release of slight overpressure, in particular resulting from thermal expansion in the static flow mode and avoids nuisance activation of safety overpressure (OPSO) device,
- ✓ For indoors installations and/or poorly ventilated areas is recommended to pipe the vent outside.

Connectable vent

- ✓ The vent may be connected to a pipe, which allows to unload in a safe area, the pressurised gas released by the PRV,
- ✓ Vent device is pre-equipped with an internal filter preventing intrusion of undesirable element (spider, dust...),
- ✓ Connection type: G1/4" RH.

OTHER BENEFITS

Pressure test point / Manometer

Regulators fitted (upon request) with a pressure testing point or Schrader type valve to allow downstream pressure monitoring. It's also possible (upon request), to have a manometer fitted. This functionality is useful for variable regulators in order for the user to easily set the regulated pressure.

Easy wall mounting

Two lateral metallic brackets may be attached to the regulator on site to allow an easy wall mounting. Both manometer and wall mounting bracket may be used together.

Manufacturers Advice

Always follow the installation instructions and local rules for gas installation for the Country.

Construction

- ✓ BP2403 regulators are design, manufactured and tested according to EN 16129 standard,
- ✓ Regulators comply with the European Pressure Equipment Directive PED 2014/68/CE, and production according to ISO 9001 quality management standard,
- ✓ Body and cover of regulators: die cast aluminium alloy,
- ✓ Body and cover of OPSO safety: die cast zinc alloy,
- ✓ Outlet connections: brass according to EN 12165,
- ✓ Diaphragm: NBR-R reinforced EN 549,
- ✓ Valve pad: HNBR according to EN 549.

Label Marking

In conformity with EN 16129 requirements, the following information is marked on the label regulator or the safety:

- ✓ NOVACOMET BP2403
- ✓ type of gas,
- ✓ inlet connection type (G) and pressure range, indicated in bar,
- ✓ outlet connection type (H) and set pressure (pressure range for variable models), indicated in mbar,
- ✓ flow capacity, indicated in kg/h of LPG or m³/h of NG and corresponding rated power in kW,
- ✓ setting of the over-pressure relief valve (PRV), if any, indicated in mbar,
- ✓ setting of the OPSO safety, if any, indicated in mbar,
- ✓ setting of the UPSO safety, if any, indicated in mbar,
- ✓ referring standard : EN 16129,
- ✓ manufacturing date: ww/yy (week/year),
- ✓ for regulators set pressure according to EN437, the downstream gas installation acceptable lost of charge indicated as follows: ΔP2 (for 2 mbar) or ΔP5 (for 5 mbar).



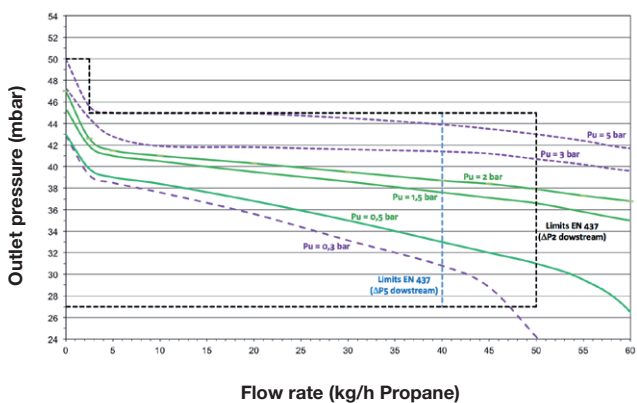
Low Pressure Regulator up to 70 kg/h

TYPICAL PERFORMANCES

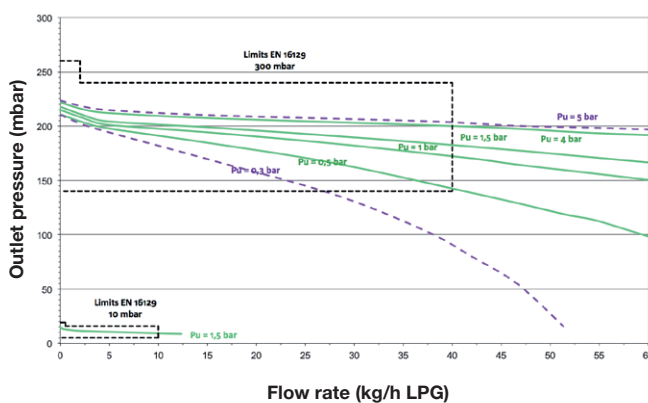
The propane capacity is indicated on the above curves. Nevertheless, it's possible to calculate the corresponding capacity for any other gas than propane using the conversion table below:

Capacity conversion		Used gas						
To get the "used gas" capacity, multiply the "declared gas" capacity by the coefficient		Butane	Propane	Natural gas-H	Natural gas-L	SNG -Air propane	Air	Nitrogen
		kg/h	kg/h	(n)m ³ /h	(n)m ³ /h	(n)m ³ /h	(n)m ³ /h	(n)m ³ /h
Declared gas	Natural gas-H (n)m ³ /h	1.42	1.25	1.00	0.98	0.69	0.78	0.80
	Propane kg/h	1.15	1.00	0.80	0.78	0.55	0.62	0.63

BP2403 - Setting 37 mbar according to EN 16129 and EN 437

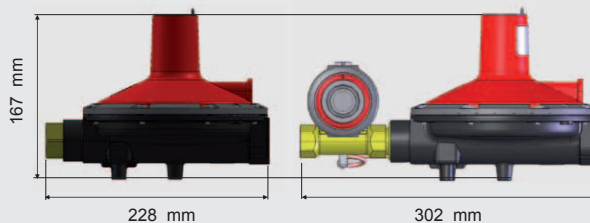
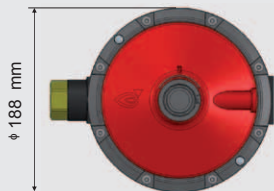


BP2403R - Setting 10-200 mbar according to EN 16129

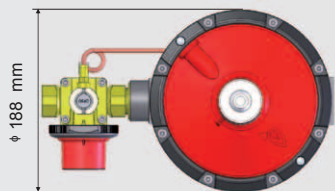


OVERALL DIMENSIONS

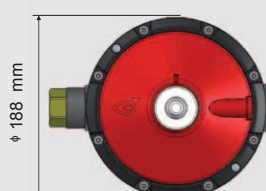
BP2403 - BP2403 OPSO



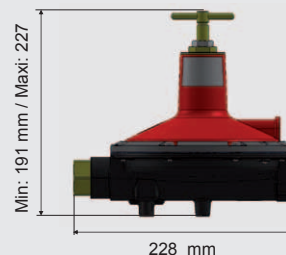
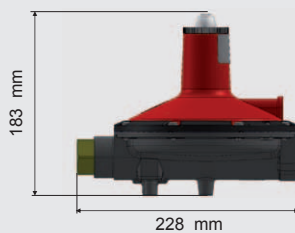
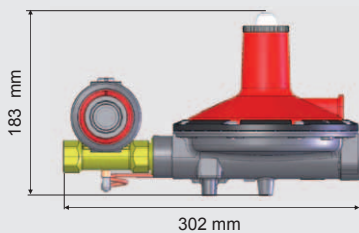
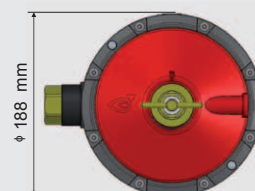
BP2403 OPSO/UPSO



BP2403 UPSO



BP2403R

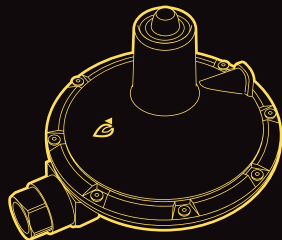


BP2403 Standard Models

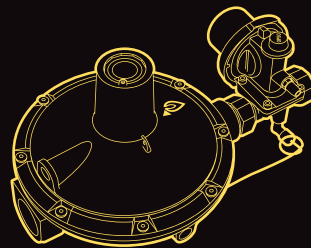
* Orientation rule: Position of the vent to be read like a watch face, seen from above with the input direction = 6 hours and the output direction = 12 hours.

PREVIOUS BP2402 code	BP2403 Code	Inlet connection	Outlet connection	Inlet pressure (Pi) bar	Outlet pressure (Pd) mbar	Flow rate (LPG)		Flow rate (NG)		OPSO mbar	PRV mbar	UPSO	Vent orientation *	Settig rule	
						kg/h	kW	(nm3/h)	kW						
BP2403															
001107AB	001107CE	MAL-G3/4	MAL-G3/4	0,24 - 0,36 (0,8)	21	-	-	25	280	-	-	-	0	CCH 96-01	
001100XX	001100CA	FEM-Rc3/4	FEM-Rc1	(0,3) 0,5 - 2	30	50 (40)	690 (552)	-	-	-	75	-	0	EN 16129	
001130PX	001130CA	FEM-3/4NPT	FEM-1 NPT	(0,3) 0,5 - 2	30	50 (40)	690 (552)	-	-	-	75	-	0	EN 16129	
001105	001105CA	FEM-Rc3/4	FEM-Rc1	(0,3) 0,5 - 2	37	50 (40)	690 (552)	-	-	-	75	-	4	EN 437 (ΔP5)	
001107AA	001107CA			(0,3) 0,5 - 2	37	50 (40)	690 (552)	-	-	-	-	-	-	0	EN 437 (ΔP5)
001107AC	001107CC			0,7 - 5	148	45	621	35	392	-	-	-	-	7	EN 16129
001107AD	001107CD			0,8 - 5	300	70	966	55	616	-	-	-	-	0	EN 16129
001117	001117CA			NUT-M20X1,5RH		0,5 - 2	37	40	552	-	-	-	75	-	5
001118	001118CA	0,5 - 2	50			40	552	-	-	-	115	-	-	5	EN 16129
BP2403 UPSO															
001120	001120CB	FEM-Rc3/4	FEM-Rc1	0,5 - 2	30	40	552	-	-	-	75	22	0	EN 16129	
001120BA	001120CA			50 - 500 mbar	37	12	166	-	-	-	-	75	28	7	EN 437 (ΔP5)
BP2403R															
001111AX	001111CC	FEM-3/4NPT	FEM-1NPT	0,5 - 4	20-300	20 - 50	276 - 690	-	-	-	+60	-	0	EN 16129	
001110	001110CA	FEM-Rc3/4	FEM-Rc1	0,5 - 4	10-200	10 - 40	138 - 552	-	-	-	+60	-	0	EN 16129	
001111XX	001111CD			0,5 - 4	20-300	20 - 50	276 - 690	-	-	-	+60	-	-	0	EN 16129
001112AA	001112CA			0,8 - 4	100-300	30 - 50	414 - 690	-	-	-	-	-	-	0	EN 16129
BP2403 OPSO															
006840BA	006840CA	FEM-Rc3/4	FEM-Rc1	0,5 - 2	30	50	690	-	-	140	75	-	0	EN 16129	
006840BB	006840CB			0,5 - 2	37	50	690	-	-	140	75	-	0	EN 437 (ΔP5)	
006842RB	006842CB			0,5 - 2	75	40 (60@1 bar)	552 (828)	-	-	140	115	-	7	EN 16129	
006842BA	006842CA			0,7 - 5	148	40	552	30	336	300	-	-	7	EN 16129	
006842BC	006842CC			0,8 - 5	300	60	828	50	560	500	-	-	7	EN 16129	
BP2403 OPSO / UPSO															
006845BB	006845CB	FEM-Rc3/4	FEM-Rc1	0,24 - 0,5	21	-	-	20	224	70	50	12	7	EN 16129	
006845BA	006845CA			0,5 - 2	30	40 (60@1 bar)	552 (828)	-	-	100	75	22	0	EN 16129	
006846RB	006846CB			0,5 - 2	37	40 (60@1 bar)	552 (828)	-	-	100	75	28	7	EN 437 (ΔP5)	
006846RC	006846CC			0,6 - 2	100	50	690	-	-	300	175	80	7	EN 16129	

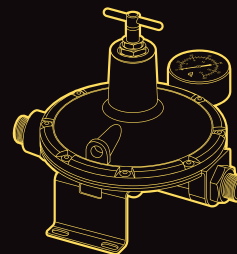
BP2403 UPSO



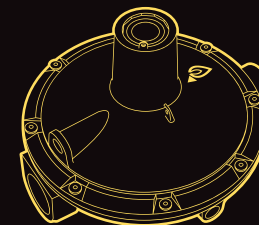
BP2403 OPSO



BP2403R



BP2403



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