



Application

These regulators and their associated safety devices are used in industrial and network installations with a high flow rate.

They can be used with LPG (butane and propane), Natural Gas, SNG and with other non-aggressive gases (air, nitrogen ...)

Depending on the model, their performances are as follows:

- 1st stage regulation (regulator, limiter, monitor*) on LPG tanks (propane or butane)
- Intermediate regulation (150 to 300mbar) after the first stage LPG regulation or from medium pressure (MPB) of Natural Gas or SNG in networks
- Low pressure regulation starting from the pressure after 1st stage regulation of LPG tanks, after intermediate medium pressure regulation of LPG or after medium pressure in network installations.

(* Monitor models – Please consult us.

Impulse pipe

The impulse pipe is the device enabling the regulator or the safety device to measure the outlet pressure to ensure the regulation or the trigger of the safety device.

For high flow rates and mainly for low pressure the impulse pipe must be done downstream on the network.

In this case, the regulators are marked "external impulse".

For the 1492B and the 1492MF, kits are available accomplishing this function of pressure measuring.

Limiter or Monitor

If in a gas installation a continuity of regulation is necessary even with the failure of the principal regulator, then the regulator must be installed in series with:

- a limiter placed downstream
- or a monitor placed upstream

In case of failure, this device will enable a regulation with a value which is approximately 10% higher than the regulator.

A limiter is a normal regulator tared to a performance 10% higher than the nominal regulation.

A monitor is a special regulator: please consult us.

The maximum flowrate of an ensemble regulator + limiter (monitor) is approximately 30% below the flowrate of the stand alone regulator.

Important

No valve must be installed:

- between the outlet of the regulator and the pressure measuring on the network.
- on the impulse pipe.

Compliance with regulations

This product range is designed in accordance with the European Pressure Equipment Directive (PED 2014/68/UE).

According to this directive only the regulators with at least one connection bigger than DN25 (or 1") are CE marked.

Regulation of outlet pressure of the regulators and the trigger point of safety devices

These pressures are set in the factory. But if necessary they can be adjusted by a qualified expert.

If the adjustment is possible, the pressure can be noted as follows:

"1,5 (1,4-1,9)bar" whereby:

1,5bar is the set factory pressure

1,4-1,9bar is the range of adjustment

Flow Rate

The maximum flow rate of these regulators depends on the inlet pressure. The maximum flow rates are indicated for an inlet minimum-maximum pressure range. In case the regulator is used with an inlet pressure below this range the equivalent flow rate is also declared.

Example:

- Inlet pressure: 0,5-2,1 (0,3)bar, flow rate for propane: 60 (40)kg/h = the guaranteed flow rate is 60kg/h of propane for an inlet pressure between 0,5 and 2,1bar and 40kg/h of propane for an inlet pressure of 0,3bar

For capacity conversions please refer to page 8.

Safety devices

Many product models are equipped with an OPSO, UPSO or PRV safety device. For further information please refer to page 9.

High Pressure Industrial Regulators - Up to 500kg/h

1391 – 1391 OPSO – 1392 – 1392 OPSO



1391HF
051001AA



1392HF OPSO
051082AA



1392HB
051002MB



1392HE
051002ME



Industrial Regulators

Application

- These high capacity, high pressure regulators and their associated safety devices are used in industrial and network applications.
- They are used in LPG, SNG or Natural Gas installations. They can also be used with other non-aggressive gases (air, nitrogen,..).
- In LPG installations they are often used as first stage regulators.
- Maximum capacity in LPG: 500kg/h
- Special active monitor models can be provided upon request.

Features

- Female threaded or flange connections
- Internal impulse (no external impulse line)
- Heavy duty design
- Comply with PED 2014/68/UE European directive
- An OPSO valve 659H can be retrofitted on models without OPSO (except for 1392HE).
- Certain models are equipped with a manometer on outlet.

Construction

- Valve body: spheroidal cast iron GS400
- Regulating units (body and cover): die cast aluminium alloy
- Diaphragm: NBR-R (FPM upon request)
- Valve pad: NBR (FPM upon request)

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pu) bar	Outlet pressure (Pd) bar	Flow rate (LPG)		Flow rate (NG)		Impulse type	OPSO bar
							kg/h	kW	(n)m ³ /h	kW		
1391HF												
051001AC	F2F	FEM-Rp1	F2F	FEM-Rp1	2,5-16	0,5 (0,38-0,6)	300	4140	240	2688	Internal	Connection 051008AB possible
051001AD	F2F	FEM-Rp1	F2F	FEM-Rp1	2,5-16	1 (0,8-1,3)	300	4140	240	2688	Internal	Connection 051008AB possible
051001AA	F2F	FEM-Rp1	F2F	FEM-Rp1	2,5-16	1,5 (1,0-2,1)	300	4140	240	2688	Internal	Connection 051008AB possible
1391HF OPSO												
051081AB	F2F	FEM-Rp1	F2F	FEM-Rp1	2,5-16	1,5 (1,0-2,1)	300	4140	240	2688	Internal	2 (1-3)
1392HF												
051002AR	F2F	FEM-Rp1	F2F	FEM-Rp1.1/2	2,5-16	0,5 (0,38-0,6)	400	5520	320	3584	Internal	Connection 051008AB possible
051002AS	F2F	FEM-Rp1	F2F	FEM-Rp1.1/2	2,5-16	1 (0,8-1,3)	400	5520	320	3584	Internal	Connection 051008AB possible
051002AA	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	2,5-16	1,5 (1,0-2,1)	400	5520	320	3584	Internal	Connection 051008AB possible
051002BA	F5F	FEM-1NPT	F5K	FEM-1.1/2NPT	2,5-16	1,5 (1,0-2,1)	400	5520	320	3584	Internal	Connection 051008AB possible
051002AC	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	4-16	3 (2,2-3,9)	500	6900	400	4480	Internal	Connection 051008AB possible
1392HF OPSO												
051082AA	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	2,5-16	1,5 (1,0-2,1)	400	5520	320	3584	Internal	2 (1-3)
051082AC	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	4-16	3 (2,2-3,9)	500	6900	400	4480	Internal	4 (2,5-4,0)
1392HB												
051002MB	B6L	RFLG PN40-DN50	B6L	RFLG PN40-DN50	2,5-16	1,5 (1,0-2,1)	400	5520	320	3584	Internal	Connection 051008AB possible
051002MM	B6L	RFLG PN40-DN50	B6L	RFLG PN40-DN50	4-16	3 (2,2-3,9)	500	6900	400	4480	Internal	Connection 051008AB possible
1392HB OPSO												
051082MB	B6L	RFLG PN40-DN50	B6L	RFLG PN40-DN50	2,5-16	1,5 (1,0-2,1)	400	5520	320	3584	Internal	2 (1-3)
051082MM	B6L	RFLG PN40-DN50	B6L	RFLG PN40-DN50	4-16	3 (2-3,2)	500	6900	400	4480	Internal	4 (2,5-4,0)
1392HE												
051002ME	B6L	RFLG PN40-DN50	B6L	RFLG PN40-DN50	2,5-16	1,5 (1,0-2,1)	400	5520	320	3584	Internal	-
051002ML	B6L	RFLG PN40-DN50	B6L	RFLG PN40-DN50	4-16	3 (2,2-3,9)	500	6900	400	4480	Internal	-
051002MN	B4L	FFLG ANSI 300-DN50	B4L	FFLG ANSI 300-DN50	2,5-16	1,5 (1,0-2,1)	400	5520	320	3584	Internal	-
051002MP	B4L	FFLG ANSI 300-DN50	B4L	FFLG ANSI 300-DN50	4-16	3 (2,2-3,9)	500	6900	400	4480	Internal	-

High Pressure Industrial Regulators - Up to 1500kg/h

1394 - 1394 OPSO - 1395 - 1395 OPSO



1394 OPSO
0510084AB



1395HB
0510054B



1395HB OPSO
051085AA



Application

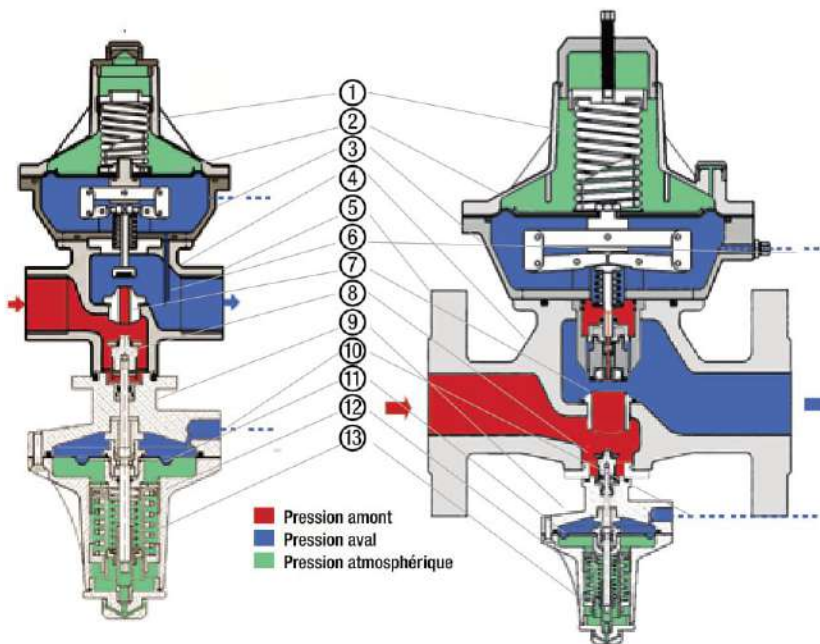
- These very high capacity, high pressure regulators and their associated safety devices are used in industrial and networks applications.
- They are used in LPG, SNG or Natural Gas installations. They can also be used with other non aggressive gases (air, nitrogen ...).
- In LPG installation they are often used as first stage regulators.
- Maximum capacity in LPG: 1500kg/h
- Special active monitor models can be provided upon request

Features

- Heavy duty design
- External impulse connection
- CE marked following PED 2014/68/UE European directive
- OPSO valve preassembled
- On models without OPSO, OPSO valve 6595H can be fitted.

Construction

- Valve body: spheroidal cast iron GS400
- Regulating units (body and cover): die cast aluminium alloy
- Diaphragm: NBR-R (FPM upon request)
- Valve pad: NBR (FPM upon request)



- 1 Pilot spring
- 2 Pilot diaphragm and disc
- 3 Pilot body and cover
- 4 Regulator body
- 5 Threaded connection or flange
- 6 Pilot impulse
- 7 Regulation (and OPSO) seat
- 8 OPSO valve pad
- 9 OPSO safety body
- 10 OPSO impulse
- 11 OPSO diaphragm and disc
- 12 OPSO safety cover
- 13 OPSO spring

■ Pression amont
■ Pression aval
■ Pression atmosphérique

■ red: upstream pressure
■ blue: downstream pressure
■ green: atmospheric pressure

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pu) bar	Outlet pressure (Pd) bar	Flow rate (LPG)		Flow rate (NG)		Impulse type	OPSO bar
							kg/h	kW	(n)m3/h	kW		
1394HB												
051004AB	B2K	FFLG PN40-DN40	B2K	FFLG PN40-DN40	2,5-16	1,5 (1,1-2,0)	610	8418	490	5488	External	Connection 051008AD possible
1394HB-OPSO												
051084AB	B2K	FFLG PN40-DN40	B2K	FFLG PN40-DN40	2,5-16	1,5 (1,1-2,0)	610	8418	490	5488	External	2 (1-3)
1395HB												
051005AH	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	2,5-16	0,5 (0,3-0,75)	1200	16560	1000	11200	External	Connection 051008AD possible
051005AJ	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	2,5-16	1 (0,85-1,25)	1200	16560	1000	11200	External	Connection 051008AD possible
051005AA	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	2,5-16	1,5 (1,1-2,0)	1200	16560	1000	11200	External	Connection 051008AD possible
051005AB	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	4-16	3 (1,85-4,0)	1520	20976	1225	13720	External	Connection 051008AH possible
1395HB OPSO												
051085AA	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	2,5-16	1,5 (1,1-2,0)	1200	16560	1000	11200	External	2 (1-3)
051085AB	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	4-16	3 (1,85-4,0)	1520	20976	1225	13720	External	4 (2,5-4,0)



1492MF
051002AJ



1494MB-OPSO
051084BA



1495MB
051005DG



Application

- These very high capacity, medium and low pressure regulators and their associated safety devices are used in industrial and networks applications.
- They are used in LPG, SNG or Natural Gas installations. They can also be used with other non-aggressive gases (air, nitrogen,...).
- Maximum capacity in LPG: 800kg/h (11,040kW), in Natural Gas: 640(n)m³/h (7168kW)
- Special active monitor models can be provided upon request.

Features

- Balanced seat design and external impulse connection provide an accurate pressure control.
- Integral limited capacity relief valve (LRV) on certain 1492 models
- CE marked following PED 2014/68/UE European directive
- OPSO valve preassembled
- OPSO valve can integrate an UPSO function (certain models).

Construction

- Valve body: spheroidal cast iron GS400
- Regulating units (body and cover): die cast aluminium alloy
- Diaphragm: NBR-R
- Valve pad: NBR

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pu) bar	Outlet pressure (Pd) bar	Flow rate (LPG)		Flow rate (NG)		Impulse type	OPSO mbar	UPSO mbar	LRV
							kg/h	KW	(n) m ³ /h	kW				
1492MF														
051002AJ	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	1-5	150 (130-220)	250	3450	200	2240	External	Connection 051008AE possible	-	-
												Connection 051008AG possible		
051002AG	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	1-5	300 (260-450)	250	3450	200	2240	External	Connection 051008AE possible	-	-
												Connection 051008AG possible		
1492MF OPSO														
051082DJ	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	1-5	150 (100-180)	250	3450	200	2240	External	450 (250-650)	-	-
051082DK	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	1-5	300 (250-400)	250	3450	200	2240	External	450 (250-650)	-	-
051082DM	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	1-5	300 (250-400)	250	3450	200	2240	External	450 (250-650)	220 (90-550)	-
1494MB														
051004BA	B2K	FFLG PN40-DN40	B2K	FFLG PN40-DN40	1-5	300 (110-400)	375	5175	300	3360	External	Connection 051008AE possible	-	-
												Connection 051008AG possible		
1494MB OPSO														
051084BA	B2K	FFLG PN40-DN40	B2K	FFLG PN40-DN40	42125	300 (110-400)	375	5175	300	3360	External	450 (250-650)	-	-
1495MB														
051005DG	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	1-5	150 (110-400)	800	11040	640	7168	External	Connection 051008AF possible	-	-
												Connection 051008BA possible		
051005AC	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	1-5	300 (110-400)	800	11040	640	7168	External	Connection 051008AF possible	-	-
												Connection 051008BA possible		
1495MB OPSO														
051085DK	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	1-5	150 (110-400)	800	11040	640	7168	External	450 (250-650)		
051085DL	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	1-5	300 (110-400)	800	11040	640	7168	External	450 (250-650)		
051085DN	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	1-5	300 (110-400)	800	11040	640	7168	External	450 (250-650)	220 (90-550)	-

Low Pressure Industrial Regulators - Up to 600kg/h

1492 - 1492 OPSO - 1494 - 1494 OPSO - 1495 - 1495 OPSO



1492BF OPSO
051082DA



11494BB-OPSO
051004AA



1495BB OPSO
051085DA



Application

- These very high capacity, medium and low pressure regulators and their associated safety devices are used in industrial and networks applications.
- They are used in LPG, SNG or Natural Gas installations. They can also be used with other non-aggressive gases (air, nitrogen,...).
- Maximum capacity in LPG: 800kg/h (11,040kW), in Natural Gas: 640(n)m³/h (7168kW)
- Special active monitor models can be provided upon request.

Features

- Balanced seat design and external impulse connection provide an accurate pressure control.
- Integral limited capacity relief valve (LRV) on certain 1492 models
- CE marked following PED 2014/68/UE European directive
- OPSO valve preassembled
- OPSO valve can integrate an UPSO function (certain models).

Construction

- Valve body: spheroidal cast iron GS400
- Regulating units (body and cover): die cast aluminium alloy
- Diaphragm: NBR-R
- Valve pad: NBR

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pu) bar	Outlet pressure (Pd) bar	Flow rate (LPG)		Flow rate (NG)		Impulse type	OPSO mbar	UPSO mbar	LRV mbar
							kg/h	kW	(n)m ³ /h	kW				
1492BF														
051002DA	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	(0,3) 0,5-5	21(16-26)	-	-	(80) 120	(896) 1344	External	Connection 051008AA possible	-	50
051002AH	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	(0,3) 0,5-5	30 (22-32)	180	2484	140	1568	External	Connection 051008AA possible	-	75
051002DC	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	(0,3) 0,5-5	37 (30-43)	(100) 150	(1380) 2070	-	-	External	Connection 051008AR possible	-	75
051002AK	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	(0,3) 0,5-5	50 (42-72)	180	2484	140	1568	External	Connection 051008AR possible	-	95
1492BF OPSO														
051082DA	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	(0,3) 0,5-5	21(16-26)	-	-	(80) 120	(896) 1344	External	70 (40-90)	15 (10-90)	50
051082BC	F5F	FEM-1NPT	F5K	FEM-1.1/2NPT	(0,3) 0,5-5	30 (22-32)	400 @2bar	5520	320 @2bar	3584	External	50 (40-90)	-	-
051082BB	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	(0,3) 0,5-5	37 (30-43)	(100) 150	(1380) 2070	-	-	External	100 (60-160)	28 (10-90)	75
1494BB														
051004AA	B2K	FFLG PN40-DN40	B2K	FFLG PN40-DN40	(0,3) 0,5-5	25(23-30)	-	-	(165) 184	(1848) 2060	External	Connection 051008BB possible	-	-
1494BB OPSO														
051084AA	B2K	FFLG PN40-DN40	B2K	FFLG PN40-DN40	(0,3) 0,5-5	25(23-30)	-	-	(165) 184	(1848/2060)	External	70 (40-90)	15 (10-90)	-
1495BB														
051005AE	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	(0,3) 0,5-5	21(18-26)	-	-	400	4480	External	Connection 051008BB possible	-	-
051005DF	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	(0,3) 0,5-5	37(28-42)	(320) 500	(4416) 6210	-	-	External	Connection 051008BC possible	-	-
1495BB OPSO														
051085DA	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	(0,3) 0,5-5	21(18-26)	-	-	400	4480	External	70 (40-90)	15 (10-90)	-
051085DH	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	(0,3) 0,5-5	37(28-42)	(320) 450	(4416) 6210	-	-	External	100 (60-160)	28 (10-90)	-
051085YA	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	0,5-5	75 (45-90)	600	8280	500	5600	External	140 (60-160)	-	-
051085YD	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	0,7-5	100 (75-120)	600	8280	500	5600	External	200 (160-300)	-	-