DATA SHEET
GG/GGB/GG0

Air Gas Ratio Regulators, Type GG/GGB/GGO

FEATURES

- Maintains Constant Air - Gas Ratio
- High Precision Regulation
- Wide Regulating Range
- Available with Inlet Pressure Compensation Diaphragm
- Inlet Pressure upto 200 mbar
- Practically Maintenance Free
- Compliance EN 746-2
- Problem free adjustment during operation is possible.

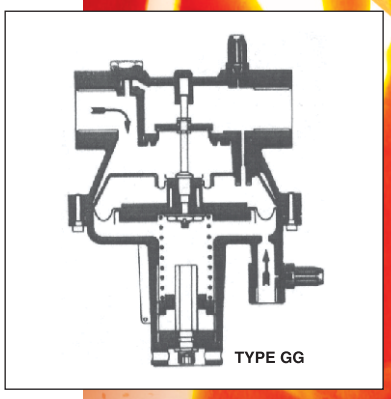
APPLICATION

Ratio Control Valves maintain constant air & gas ratio and regulate the gas pressure

Type GG	:	For Steady Control
Type GGB	:	For On - Minimum - Off Control
Type GGO	:	Zero Pressure Regulation
	:	(The Gas inlet pressure must always be higher than the control pressure).

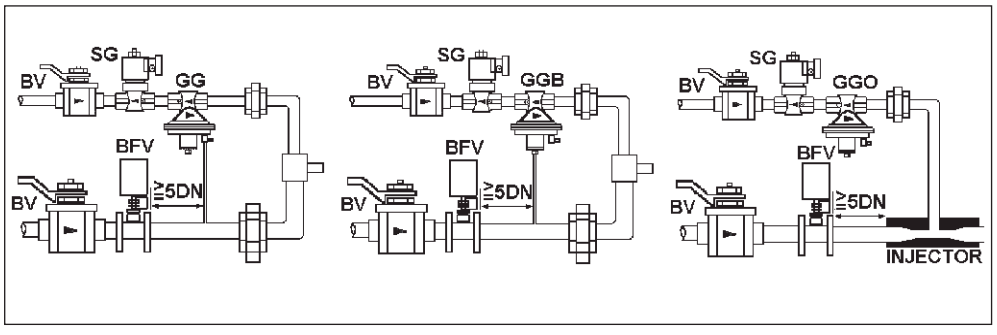
CONSTRUCTION

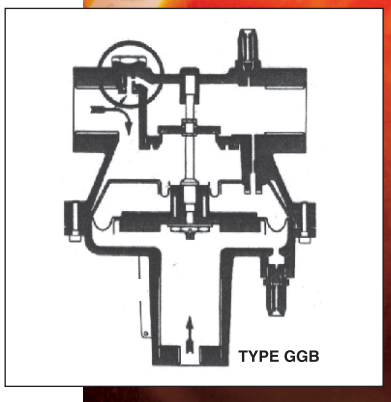
• Valve Body	:	Aluminium Silicon Alloy
• Valve Disc	:	Aluminium with vulcanized Perbunan (Nitrile Seat)
• Compensating Diaphragm	:	Perbunan/ Nitrile
• Working Diaphragm	:	Perbunan/ Nitrile
• Valve Seat & Stem	:	Aluminium
• Size Range	:	15, 20, 25, 40 to 80 mm
• End Connection	:	Screwed to BSP (F) / NPT (F) upto 65 mm; 80 mm flanged
• Working Temperature	:	(-) 15^{0} C to (+) 60^{0} C
• Inlet Pressure	:	up to 200 millibar
• Combustion Air Pressure	:	GG - 0.5 to 120 mbar & GGB - 0 to 120 mbar
• Controlled Outlet Pressure (variable)	:	GG - 1.2 to 120 mbar GGB - 0 to 117 mbar
For GG Type,	:	Outlet Pressure = Control Pressure (Combustion Air)
For GGB Type,	:	Outlet Pressure = Control Pressure less 2 to 4 mbar
• Differential Pressure	:	Maximum 100 mbar (Between Inlet & Outlet)
• Fluids	:	All Gases- Natural Gas, LPG, Biologically Produced Methane. Special Version available for Air
• Regulating Pressure Range	:	GG (10 : 1) with Control Pressure 50 to 0.5 mbar GG (08 : 1) with Control Pressure 32 to 0.5 mbar GG (06 : 1) with Control Pressure 19 to 0.5 mbar GG (05 : 1) with Control Pressure 12.5 to 0.5 mbar



INSTALLATION

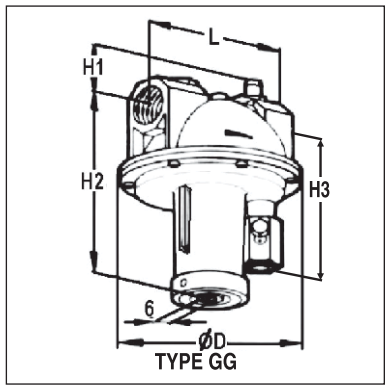
Safety Solenoid Valve must always be fitted upstream of Air Gas Ratio Regulator and in the direction of flow marked on the valve body. The spring retaining dome must be installed downwards. Spring force of GG can be adjusted by means of a 6 mm Allen key. During installation of GG/ GGB, fixed orifice plates or variable flow resistor must be used in the gas line as well as combustion air pipeline. These orifice plates will determine and fix Air Gas ratio required for complete combustion. When using GGO, variable flow resistor/ orifice plate should be provided in the gas pipe line, before mixture (Injector). If combustion air pressure is higher than the gas inlet pressure, the variable flow resistor should be used to turn down the gas control pressure.





NOTE

Gas inlet pressure must be always higher than the control pressure. When supplied threaded version size 15 to 50 MM, is provided with Internal By-pass connection. When supplied with Externally Screwed or Self Casted flanges, requires additional external impulse line to be fitted Size Rp 3/8" (at distance of minimum 5 pipe size after outlet of Air/Gas Ratio control).



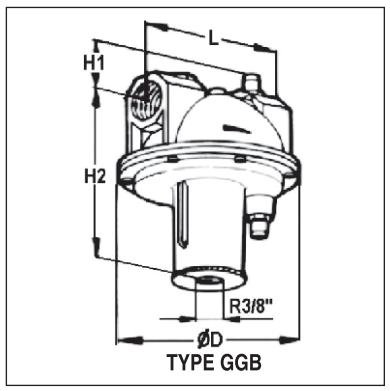
TYPE GG

GENERAL FEATURES

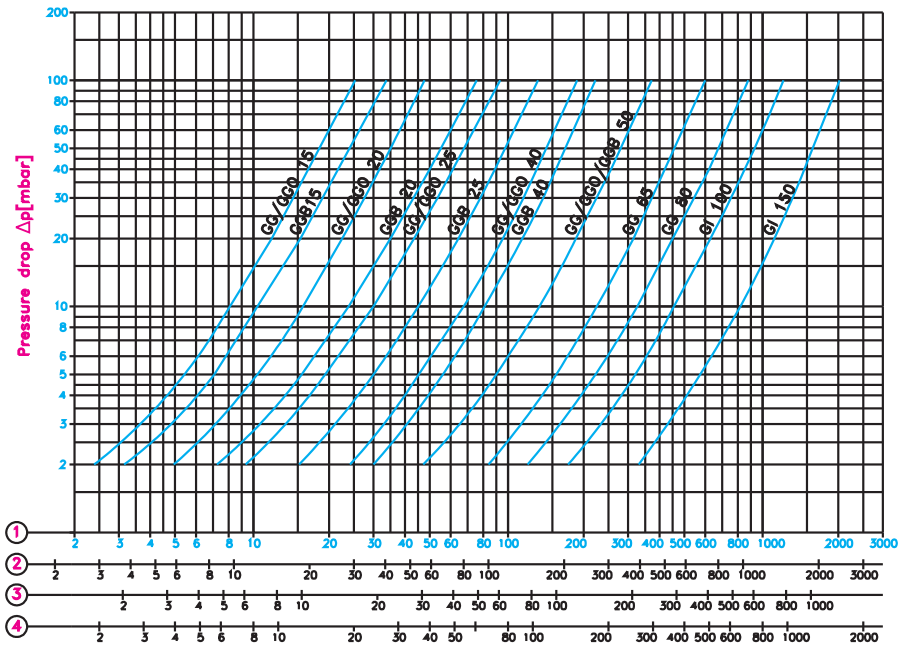
'GG' For steady control with a spring fitted for compensating the weight of the diaphragm assembly, provided with small diameter internal impulse connection.
'GGB' For On, minimum Off control. No spring provided; supplied for by-pass with low fire operation. Large size valve requires external impulse.
GGO- For zero pressure control, with spring for compensating the weight of the metering assembly, has a small diameter internal Impulse line. Zero pressure governer **GGO** for Injector (Pre Mix Type) burner.

DIMENSIONAL DETAILS

Model	Size mm	Connection	Dimensions						Approx Weight Kgs.
			L	H1	H2	ØD	C	H3	
GG 15 R02	15	Rp 1/2	90	45	119	98	29	100	0.7
GG 20 R02	20	Rp ¾	100	40	150	120	38	119	1.1
GG 25 R02	25	Rp 1	110	40	155	132	46	122	1.3
GG 40 R02	40	Rp 1 ½	158	55	210	190	70	135	3.1
GG 50 R02	50	Rp 2	190	73	250	240	88	177	4.6
GG 65 R02	65	Rp 2 ½	190	73	250	240	88	177	4.5
GG 80 F02	80	3	380	102	425	310	115	267	10
GGB15R02	15	Rp 1/2	90	45	119	98	29	100	0.7
GGB20R02	20	Rp ¾	100	40	150	120	38	119	1.1
GGB25R02	25	Rp 1	110	40	155	132	46	122	1.3
GGB40R02	40	Rp 1 ½	158	52	210	190	70	135	3.1
GGB50R02	50	Rp 2	190	68	250	240	88	177	4.6
GGB65R02	65	Rp 2 ½	190	73	250	240	88	177	4.5
GGB80F02	80	3	380	102	425	310	115	267	10



TYPE GGB



SPECIFIC GRAVITY :

① **Natural Gas = 0. 62**

② **Town Gas = 0. 45**

③ **LP Gas = 1. 56**

④ **Air = 1. 00**

$\dot{V}=NM^3/hr$

Note:
Technical specifications and dimensions are subject to change without prior notice.
Dimensions in the table are approximate subject to final confirmation by AVCON.

WESTERN

Mumbai
Plot No. 65, Road No. 13, MIDC Marol, Andheri (East), Mumbai - 400 093
Tel.No.: 022-6915 6100 / 83909 17431
E-mail : acplmumbai.sales@avconcontrols.com

Pune
Plot No. T - 108, MIDC Bhosari, Pune - 411 026. Maharashtra (INDIA).
Tel.No.: 020-2712 0776 / 2712 0540
E-mail : acplmumbai.sales@avconcontrols.com

Baroda
307, Mangaldeep Complex, Sampatrao Colony, Productivity Road, Baroda - 390 005.
Tel.No.: 022-6915 6100 / 83909 17431
E-mail : acplmumbai.sales@avconcontrols.com

EASTERN

Kolkata
720, 7th Floor, 33/1, N.S. Road, Marshal House, Kolkata- 700 001.
Tel.No.: 033-4068 1180 / 77109 00889
E-mail : acplmumbai.sales@avconcontrols.com

SOUTHERN

Chennai
249, First Floor, Tiny Sector Ambattur Industrial Estate, Chennai - 600 058
Tel.No.: 044-4807 4107 / 089393 12809
E-mail : acplmumbai.sales@avconcontrols.com

Hyderabad
SSR ENCLAVE, Plot No. 81, Road No.4, Vasanth Nagar, Nizampet X Roads (Near JNTU College Metro Station,) Hyderabad - 500085.
Tel.No.: 7995086416
E-mail : acplmumbai.sales@avconcontrols.com

Bangalore
Tel.No.: 084312 56574
E-mail : acplmumbai.sales@avconcontrols.com

NORTHERN

New Delhi
Unit No. 708, 7th Floor, 94 Meghdoot, Nehru Place, New Delhi - 110019
Tel.No.: 011-42639736 / 88282 69844
E-mail : acplmumbai.sales@avconcontrols.com

avcon®
Manufactured by:
AVCON CONTROLS PVT. LTD.
Plot No. 65, Road No.13, MIDC Marol,
Andheri (East), Mumbai - 400 093 (INDIA).
Phone : +91-22-6915 6100.
E-mail : avcon@avconcontrols.com
acplmumbai.sales@avconcontrols.com
Website : www.avconcontrols.com