

KEEFER BROS

(AUST) PTY LTD

90 years Servicing the Gas Industry

EXCESS FLOW VALVES

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MAXI TROL SENTRY GS - SERIES

Excess Flow Valve solution for AS/NZS5601.1 Clause 5.2.11

PART No. KBGS25HH 4A1Z1	
Model Series	GS Sentry EFV - "D" Series
EFV Working Pressure	1.25kPa – 10kPa
Gas Meter Model	Model U8 = 7.5 m ³ /h
EFV Nominal flow	4.0 m ³ /h = 155Mj/hr
EFV Shut-off	5.8 m ³ /h = 225Mj/hr
Orientation	Male Inlet x Fem Outlet
Flow Direction	Vertical Downward *ONLY*
Thread Standard	DN25 ISO 7(Rp.)



WARNING maximum Gas Meter flow rate must be greater than EFV shut-off rate

PART No. KBGS25HH 4A1Z1	
Model Series	GS Sentry EFV - "Z" Series
EFV Working Pressure	1.25kPa – 10kPa
Gas Meter Model	Model U8 = 7.5 m ³ /h
EFV Nominal flow	4.0 m ³ /h = 155Mj/hr
EFV Shut-off	5.8 m ³ /h = 225Mj/hr
Orientation	Fem Inlet x Male Outlet
Flow Direction	Vertical-up / Horizontal
Thread Standard	DN25 ISO 7(Rp.)



WARNING maximum Gas Meter flow rate must be greater than EFV shut-off rate



MAXI TROL SENTRY GS - SERIES

Excess Flow Valve solution for AS/NZS5601.1 Clause 5.2.11



PART No. KBGS25HH 6AID1

Model Series	GS Sentry EFV - "D" Series
EFV Working Pressure	1.25kPa - 10kPa
Gas Meter Model	Model U10 = 10 m ³ /h
EFV Nominal flow	6.0 m ³ /h = 230Mj/hr
EFV Shut-off	8.7 m ³ /h = 330Mj/hr
Orientation	Male Inlet x Fem Outlet
Flow Direction	Vertical Downward *ONLY*
Thread Standard	DN25 ISO 7(Rp.)



EXCESS FLOW VALVE

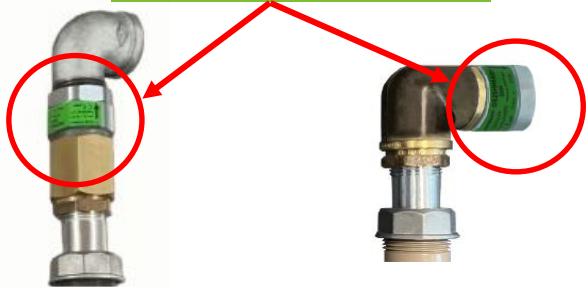
WARNING maximum Gas Meter flow rate must be greater than EFV shut-off rate

OR



PART No. KBGS25HH 6AIZ1

Model Series	GS Sentry EFV - "Z" Series
EFV Working Pressure	1.25kPa - 10kPa
Gas Meter Model	Model U10 = 10 m ³ /h
EFV Nominal flow	6.0 m ³ /h = 230Mj/hr
EFV Shut-off	8.7 m ³ /h = 330Mj/hr
Orientation	Fem Inlet x Male Outlet
Flow Direction	Vertical-up / Horizontal
Thread Standard	DN25 ISO 7(Rp.)



EXCESS FLOW VALVE

WARNING maximum Gas Meter flow rate must be greater than EFV shut-off rate



MAXI TROL SENTRY GS - SERIES

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PART No. KBGS32HH 10IAZ

Model Series	GS Sentry EFV - "Z" Series
EFV Working Pressure	1.25kPa - 10kPa
Gas Meter Model	Model AL425 = 17 m ³ /h
EFV Nominal flow	10.0 m ³ /h = 400Mj/hr
EFV Shut-off	14.5 m ³ /h = 580Mj/hr
Orientation	Fem Inlet x Male Outlet
Flow Direction	Horizontal
Thread Standard	DN32 ISO 7(Rp.)



EXCESS FLOW VALVE

WARNING maximum Gas Meter flow rate must be greater than EFV shut-off rate



PART No. KBGS32HH 10IAZ

Model Series	GS Sentry EFV - "Z" Series
EFV Working Pressure	1.25kPa - 10kPa
Gas Meter Model	Model AL425 = 17 m ³ /h
EFV Nominal flow	10.0 m ³ /h = 400Mj/hr
EFV Shut-off	14.5 m ³ /h = 580Mj/hr
Orientation	Fem Inlet x Male Outlet
Flow Direction	Vertical-up
Thread Standard	DN32 ISO 7(Rp.)



EXCESS FLOW VALVE

WARNING maximum Gas Meter flow rate must be greater than EFV shut-off rate



MAXI TROL SENTRY GS - SERIES

Excess Flow Valve solution for AS/NZS5601.1 Clause 5.2.11



PART No. KBGS40HH 16IAZ

Model Series	GS Sentry EFV - "Z" Series
EFV Working Pressure	1.25kPa - 10kPa
Gas Meter Model	Model AL1000 = 27 m ³ /h
EFV Nominal flow	16.0 m ³ /h = 610Mj/hr
EFV Shut-off	23.2 m ³ /h = 890Mj/hr
Orientation	Fem Inlet x Male Outlet
Flow Direction	Vertical-up
Thread Standard	DN40 ISO 7(Rp.)



EXCESS FLOW VALVE

WARNING maximum Gas Meter flow rate must be greater than EFV shut-off rate



PART No. KBGS40HH 16IAZ

Model Series	GS Sentry EFV - "Z" Series
EFV Working Pressure	1.25kPa - 10kPa
Gas Meter Model	Model AL1000 = 27 m ³ /h
EFV Nominal flow	16.0 m ³ /h = 610Mj/hr
EFV Shut-off	23.2 m ³ /h = 890Mj/hr
Orientation	Fem Inlet x Male Outlet
Flow Direction	Horizontal
Thread Standard	DN40 ISO 7(Rp.)



EXCESS FLOW VALVE

WARNING maximum Gas Meter flow rate must be greater than EFV shut-off rate



CONVERSION TABLES FOR SELECTING A SENTRY GS EXCESS FLOW VALVE

SENTRY GS EFV are selected by determining the total nominal load of all gas appliances. When **multilayer piping** is used, it is necessary to recalculate the GS function. **For multilayer piping always refer to the manufacturer's instructions for correct sizing.**

Table 1: NG Australia

Rel. Density: 0.6; Heating value: 38 MJ/m³

Table 2: LPG (propane) Australia

Rel. Density: 1.5; Heating value: 96 MJ/m³

Table 3: LPG (butane) New Zealand

Rel. Density: 2.08; Heating value: 125.7 MJ/m³

GS Type	Nom. flow	One gas appliance (with max. 80% VN)	Several gas devices added up to max. load	max. closing flow
	m ³ /h	[kWh]	[MJ/hr]	[kWh]
GS1.6K	1.7	14	50	17
GS2.5K	2.6	22	79	27
GS4K	4.1	34	122	43
GS6K	6.2	52	187	65
GS10K	10.3	87	313	109
GS16K	16.5	139	500	174

GS Type	Nom. flow	One gas appliance (with max. 80% VN)	Several gas devices added up to max. load	max. closing flow
	m ³ /h	[kWh]	[MJ/hr]	[kWh]
GS1.6K	1.1	20	72	28
GS2.5K	1.6	30	108	43
GS4K	2.6	48	173	69
GS6K	3.9	73	263	104
GS10K	6.5	122	439	174
GS16K	10.4	195	702	278

GS Type	Nom. flow	One gas appliance (with max. 80% VN)	Several gas devices added up to max. load	max. closing flow
	m ³ /h	[kWh]	[MJ/hr]	[kWh]
GS1.6K	0.9	22	79	31
GS2.5K	1.4	34	122	48
GS4K	2.2	54	194	77
GS6K	3.3	81	292	116
GS10K	5.5	136	490	194
GS16K	8.9	217	781	310

CONVERSION TABLES FOR SELECTING A SENTRY GS EXCESS FLOW VALVE

NOTICE

- Conduct pressure/tightness test with the **SENTRY GS EFV in open position!**
- Note the flow direction!

• Re-opening the SENTRY GS EFV:

- Close the main gas manual shut-off valve upstream next to the SENTRY GS.
- Repair the downstream pipe.
- After approximately 1 minute, slowly reopen the main gas manual shut-off valve.

- Before Installation:** Compare actual SENTRY GS EFV with planned type (see specification on label and technical details). Make sure the piping system is depressurized. The maximum gas meter flow rate must be greater than the shutoff rate of the EFV.
- Installation Point:** Install downstream of the **regulator and prior to any multilayered pipe.**
- Gas Flow Direction:** Indicated by arrow on the label.
- Mounting Position:** As indicated on label.

NOTICE

If the SENTRY GS EFV is not directly downstream of the main gas manual shut-off valve, it may be necessary to wait more than 1 minute for the SENTRY GS EFV to reset.

LABEL COLOUR	Yellow	Brown	Green	Red	Orange
(Nominal Flow rate VGas Natural Gas (m ³ /h); d=0.64)	2.5	4	6	10	16