



KEEFER BROS

(AUST) PTY LTD

90 years Servicing the Gas Industry



EXCESS FLOW VALVES

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FS604807



MAXITROL SENTRY GS - SERIES

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



PART No. KBGS25HH 4AIZ1

Model Series	GS Sentry EFV - "D" Series
EFV Working Pressure	1.25kPa – 10kPa
Gas Meter Model	Model U8 = 7.5 m³/h
EFV Nominal flow	4.0 m³/h = 155Mj/hr
EFV Shut-off	5.8 m³/h = 225Mj/hr
Orientation	Male Inlet x Fem Outlet
Flow Direction	Vertical Downward *ONLY*
Thread Standard	DN25 ISO 7(Rp.)



Excess Flow

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

OR



PART No. KBGS25HH 4AIZ1

Model Series	GS Sentry EFV - "Z" Series
EFV Working Pressure	1.25kPa – 10kPa
Gas Meter Model	Model U8 = 7.5 m³/h
EFV Nominal flow	4.0 m³/h = 155Mj/hr
EFV Shut-off	5.8 m³/h = 225Mj/hr
Orientation	Fem Inlet x Male Outlet
Flow Direction	Vertical-up / Horizontal
Thread Standard	DN25 ISO 7(Rp.)



Excess Flow



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



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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



MAXITROL 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 m³/h
EFV Nominal flow	10.0 m³/h = 400Mj/hr
EFV Shut-off	14.5 m³/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 m³/h
EFV Nominal flow	10.0 m³/h = 400Mj/hr
EFV Shut-off	14.5 m³/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



MAXITROL 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
		[kWh]	[MJ/hr]	[kWh]	[MJ/hr]	
	m ³ /h					m ³ /h
GS1.6K	1.7	14	50	17	61	2.5
GS2.5K	2.6	22	79	27	97	3.8
GS4K	4.1	34	122	43	155	6.0
GS6K	6.2	52	187	65	234	9.0
GS10K	10.3	87	313	109	392	15.0
GS16K	16.5	139	500	174	626	24.0

GS Type	Nom. flow	One gas appliance (with max. 80% VN)		Several gas devices added up to max. load		max. closing flow
		[kWh]	[MJ/hr]	[kWh]	[MJ/hr]	
	m ³ /h					m ³ /h
GS1.6K	1.1	20	72	28	101	1.6
GS2.5K	1.6	30	108	43	155	2.4
GS4K	2.6	48	173	69	248	3.8
GS6K	3.9	73	263	104	374	5.7
GS10K	6.5	122	439	174	626	9.5
GS16K	10.4	195	702	278	1001	15.2

GS Type	Nom. flow	One gas appliance (with max. 80% VN)		Several gas devices added up to max. load		max. closing flow
		[kWh]	[MJ/hr]	[kWh]	[MJ/hr]	
	m ³ /h					m ³ /h
GS1.6K	0.9	22	79	31	112	1.4
GS2.5K	1.4	34	122	48	173	2.1
GS4K	2.2	54	194	77	277	3.3
GS6K	3.3	81	292	116	418	4.9
GS10K	5.5	136	490	194	698	8.1
GS16K	8.9	217	781	310	1116	12.9

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!
- 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.

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.

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