

## OVER RANGE PROTECTION VALVE (GAUGE SAVER)



The Budenberg 6GM over range protection valve has been primarily designed to protect pressure gauges (or other instruments) against over pressure conditions, either designed or accidental due to failure of other systems.

The operation of the unit is based upon a piston assembly that can open or close dependant upon the applied pressure at the inlet. The unit should be fitted directly to the instrument to be protected. An internal spring holds the valve open under normal conditions. When the inlet pressure exceeds the setting pressure of the valve then the spring is compressed and closes the valve.

Setting is achieved by selection of the appropriate spring to operate in the correct range and adjustment of the spring adjuster until the desired operational setting is achieved.

Units can be used on any clean, non viscous fluids or gases that are compatible with the chosen materials of construction.



### Setting Pressure Ranges

Units can be set at a range of pressures from 2 to 275 bar (30 to 4000 psi). Setting can be user adjusted within the range the spring.

NB Factory settings are done on static pressure and as such the unit may require some slight user adjustment to ensure correct operation when under the dynamic application conditions

### Maximum Working Pressure

700 bar or 10,000 psi maximum pressure

### Connection Size

Standard range is ½" NPT Male inlet x 1/2" NPT Female outlet

Other connections, including BSP, are available but may be subject to a minimum order quantity

### Material of Construction (Standard)

Body	-316 Stainless Steel to NACE
Spring Housing	-316 Stainless Steel to NACE
Piston	- 316 Stainless Steel to NACE
Spring Adjuster	- 316 Stainless Steel to NACE
Body Seal	- 316 Stainless Steel to NACE
O rings	- Nitrile
	- Ethylene Propylene for Skydrol
	- Viton for NACE
Spring	- BS 5216 HS3 Spring Steel, Nickel plated

Other materials can be supplied but may be subject to a minimum batch quantity

### Spring selection

- Spring A - setting range of 30 to 150 psi (2 - 10 bar)
- Spring B - setting range of 151 to 600 psi (10 - 40 bar)
- Spring C - setting range of 601 to 1600 psi (40 - 110 bar)
- Spring D - setting range of 1600 to 4000 psi (110 - 275 bar)

### Temperature

Up to 150 Degrees Celsius

### Testing

Set and tested to the required pressure

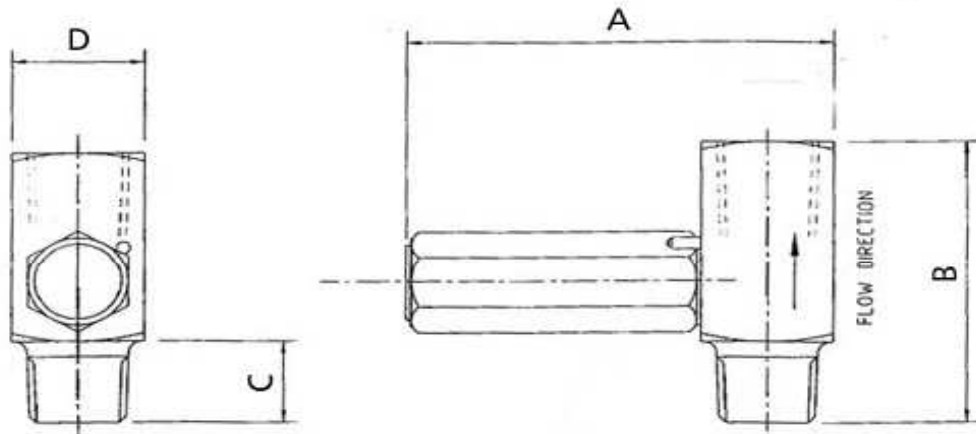
### Traceability

Body marked with the setting pressure and model number  
When NACE or material certification to EN 10204 3.1b is requested then the body is marked with the cast number and the spring housing is marked with the cast numbers of the housing and piston

### Options

Customer names etched on the body, special designs , undertaken please contact or Sales Office.

**Dimensions**



Model No	Inlet	Outlet	A	B	C	D
6GMM88S	1/2" NPT M	1/2" NPT F	103mm	70mm	19mm	32mm
					N/A	32mm

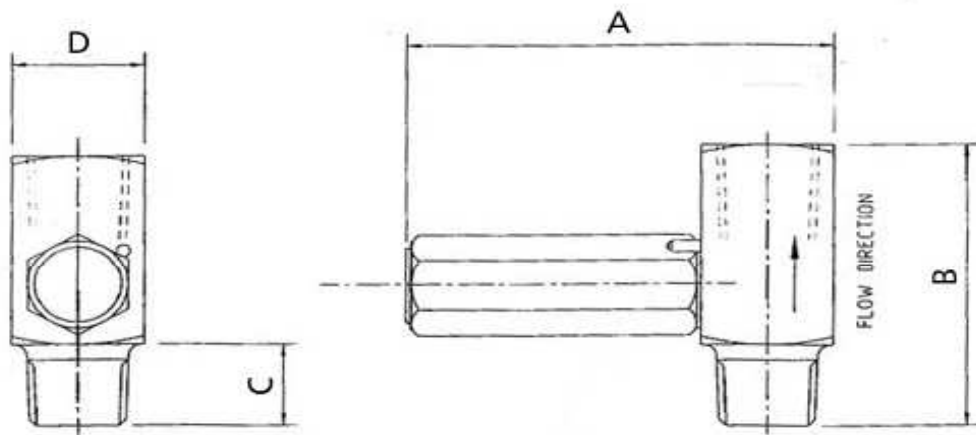
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**Model Codes**

Model Code	Connection Type	Process Connection Size	Instrument Connection Size	Connection Type	Pressure Setting psi	Material	Special Applications
<b>6GM</b>	<b>M</b>	<b>8</b>	<b>8</b>	<b>N</b>	<b>A</b>	<b>S</b>	<b>N</b>
	M = Male F = Female	4 = 1/4" 6 = 3/8" 8 = 1/2"	4 = 1/4" 6 = 3/8" 8 = 1/2"	B = BSPP N = NPT R = BSPT M = Metric	A = 30-150 B = 151-600 C = 601-1600 D = 1601- 4000	S = 316 SS B = Brass M = Monel	N = NACE O = Oxygen S = Skydrol

Specifications and dimensions in this leaflet, are subject to change without prior notice.

**Dimensions**



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6GMM88S	1/2" NPT M	1/2" NPT F	103mm	70mm	19mm	32mm
6GMF88S	1/2" NPT F	1/2" NPT F	103mm	70mm	N/A	32mm

Units ca

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