

## Spring Loaded Regulator

J44 is an unbalanced valve, diaphragm sensed, spring-loaded, pressure regulator, for use with steam. Its heavy duty all metal construction makes it ideal and robust enough for the high temperature service. With accurate and reliable operation, it is ideal for low, and medium pressure applications.

For an operational overview, please refer to pages 18 and 19.



### Standard Features

**Valve Size:**

- 4mm UNBALANCED

**Materials of construction:**

- BODY - STAINLESS STEEL - BS EN 10088 1.4401
- SPRING HOUSING - STAINLESS STEEL - BS EN 10088 1.4401
- SEAT - HASTELLOY - UNS 10276
- TRIM & DIAPHRAGM - STAINLESS STEEL - BS EN 10088 1.4401

**Connections:**

- LINE 1/2" BSPP (INLET & OUTLET)

**Maximum Inlet Pressure:**

- 50 BAR (3045 PSI) @ 20°C & 100°C

FOR OTHERS - SEE PAGE 26

**Outlet Pressure Range:**

- 0 - 35 BAR (0 - 435 PSI) @ 20°C & 100°C

**Media:**

- STEAM

**Weight:**

- 1.5 Kg (3.3 lb)

### Options

**Valve Size:**

- 7mm UNBALANCED

## Applications

- Manufacturing Processes
- Brewing Industry
- Naval
- Power Stations

## Ordering Information

| TYPE | VALVE SEAT SIZE                  | MATERIAL OPTION    | CONNECTIONS         | OUTLET PRESSURE  |
|------|----------------------------------|--------------------|---------------------|--|
| J44  | <b>B</b> (4mm)<br><b>D</b> (7mm) | <b>A9</b> (ST/STL) | <b>E3</b> (½" BSPP) | <b>L</b> (0-4 BAR)<br><b>R</b> (0-15 BAR)<br><b>T</b> (0-35 BAR) |

ORDERING INFORMATION EXAMPLE:

**J44BA9E3R**

## Notes

## Technical Specifications

### Pressure

|                               | <b>PRESSURE</b>   |
|-------------------------------|-------------------|
| TEST (PROOF) PRESSURE         | 75 BAR (1088 PSI) |
| MAXIMUM INLET PRESSURE        | SEE TABLE BELOW   |
| REDUCED OUTLET PRESSURE RANGE | SEE TABLE BELOW   |

### Outlet Pressure Ranges

| <b>WORKING TEMP</b> | <b>MAX INLET PRESSURE</b> | <b>MAX OUTLET PRESSURE</b> |
|---------------------|---------------------------|----------------------------|
| 20°C                | 50 BAR (726 PSI)          | 35 BAR (508 PSI)           |
| 100°C               | 50 BAR (726 PSI)          | 35 BAR (508 PSI)           |
| 200°C               | 45 BAR (653 PSI)          | 32 BAR (464 PSI)           |
| 300°C               | 35 BAR (508 PSI)          | 25 BAR (363 PSI)           |

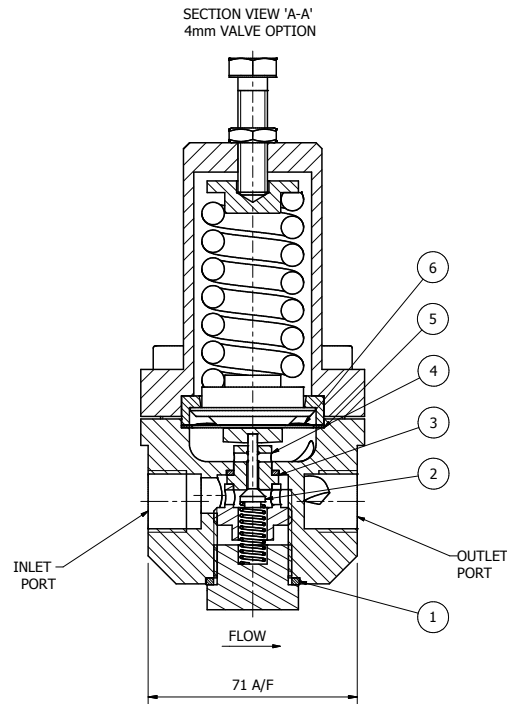
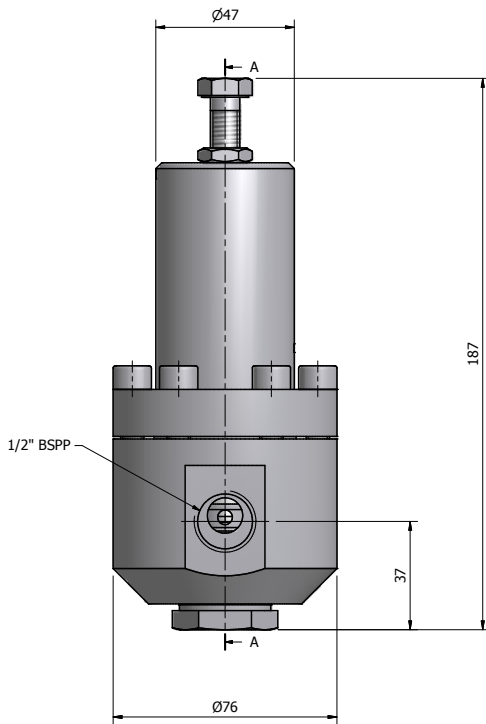
### Valve Size

|                  | <b>4mm</b>                                   | <b>7mm</b>                                    |
|------------------|--|---|
| NOMINAL SIZE     | 4mm (0.157")                                 | 7mm (0.276")                                  |
| ORIFICE AREA A1  | 12.64mm <sup>2</sup> (0.02 in <sup>2</sup> ) | 22.94mm <sup>2</sup> (0.036 in <sup>2</sup> ) |
| PORT AREA A2     | 127.2mm <sup>2</sup> (0.12in <sup>2</sup> )  | 127.2mm <sup>2</sup> (0.12in <sup>2</sup> )   |
| FLOW COEFFICIENT | Kv = 0.38 (Cv = 0.44)                        | Kv = 0.68 (Cv = 0.79)                         |

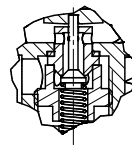
### Spares Code

| <b>SPARES</b> | <b>SEAT OPTION</b>               |
|---------------|----------------------------------|
| <b>J44S</b>   | <b>B</b> (4mm)<br><b>D</b> (7mm) |

## Technical Specifications



7mm VALVE OPTION



## Spares BOM

| ITEM | DESCRIPTION     | MATERIAL           | QTY |
|------|-----------------|--------------------|-----|
| 1    | SEALING RING    | BS EN 10088 1.4401 | 1   |
| 2    | VALVE           | UNS 10276          | 1   |
| 3    | SEALING RING    | BS EN 10088 1.4401 | 1   |
| 4    | VALVE SEAT      | UNS 10276          | 1   |
| 5    | GASKET          | KLINGERSIL C4500   | 1   |
| 6    | DIAPHRAGM PLATE | BS EN 10088 1.4401 | 1   |