

# spirax sarco

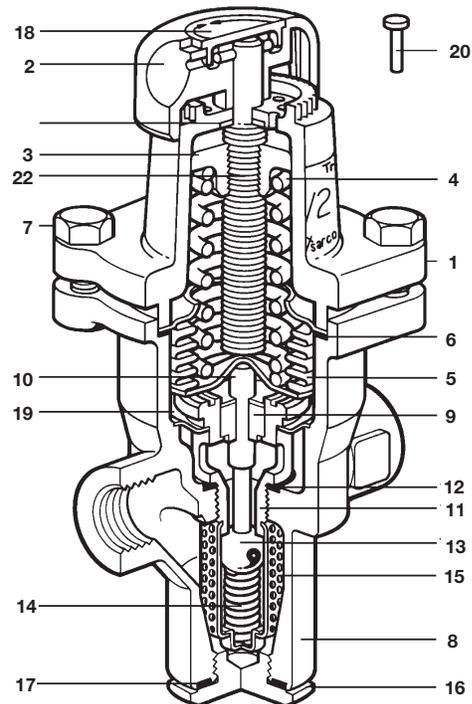
## Stainless Steel Direct Operated Pressure Regulator SRV2S

The SRV2S is a compact, stainless steel, direct acting pressure reducing valve for steam or gases such as compressed air. All wetted parts are constructed in 316L stainless steel.

<b>Model</b>	SRV2S
<b>Sizes</b>	1/2", 3/4", 1"
<b>Connections</b>	NPT
<b>Construction</b>	Stainless Steel
<b>Options</b>	Flanged ANSI 150. Ductile Iron Body Material see BRV2 TIS 3.107

### Typical Applications

Sterilizers, autoclaves, humidifiers, culinary steam supplies, and other equipment requiring reduced pressure to operate.



### Construction Materials

No.	Part	Material	Material Spec.
1	Spring Housing	Aluminum	LM6-Electroless Nickel Finish
2	Adjustment Hand Wheel	Plastic	Mineral Reinforced Nylon
3	Top Spring Plate	Cast Iron	DIN 1691 GG 20 Electroless Nickel Finish
4	Pressure Adjustment Spring	Silicone Chrome Spring Steel	BS 2803 685 A5
5	Bellows Assembly	Stainless Steel	316TV/316L
6	Bellows Assembly Gasket	Reinforced Exfoliated Graphite	
7	Hexagon Bolt	Stainless Steel	BS 6105 A 270
8	Body	Stainless Steel (Electropolish Finish)	ASTM A 351 CF 3M
9	Guide Bush	Graphite Filled PTFE	
10	Pushrod	Stainless Steel	ASTM A 276 316L
11	Valve Seat	Stainless Steel	ASTM A 351 CF 3M
12	Valve Seat Gasket	Stainless Steel	BS 1449 316 S11
13	Valve	Stainless Steel	316L
14	Valve Return Spring	Stainless Steel	BS 20056 316 S42
15	Strainer Screen	Stainless Steel	BS 1449 316 SH
16	Bottom Cap	Stainless Steel	ASTM A 276 316L
17	Bottom Cap Gasket	PTFE	
18	Spring Range Identification Plate	Plastic	Polypropylene
19	Bulkhead Plate	Stainless Steel	AISI 316L
20	Tamperproof Pin	Mild Steel-Copper Plated	
21	Washer	Stainless Steel	316L
22	Drive Spindle	Carbon Steel	BS 970 230 M07-Electroless Nickel Finish

### Limiting Operating Conditions

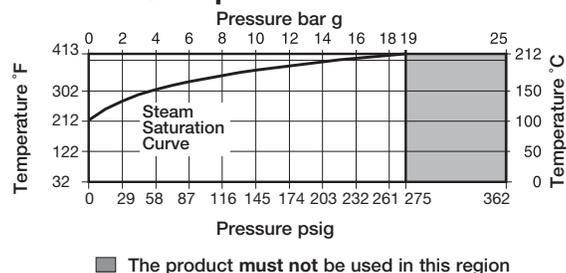
Body design conditions	PN25
Maximum design pressure	362 psig@248°F (25barg @ 120°C)
Maximum design temperature	413°F@275 psig (212°C @19barg)
Minimum allowable temperature	32°F (0°C)
Maximum operating pressure for saturated steam service	275 psig (19 barg)
Maximum operating temperature	413°F@275 psig (212°C @19barg)
Minimum operating temperature	32°F (0°C)
<b>Note:</b> For lower operating temperatures consult Spirax Sarco	
Maximum downstream reduced pressure	125 psig (19 barg)
Maximum differential pressure	275 psig (19 barg)
Maximum recommended turndown ratio 10:1 at maximum flow	
Designed for a maximum cold hydraulic test pressure of	551 psig (38 barg)
<b>Note:</b> With internals fitted, test pressure must not exceed 275 psig (19 barg)	

### Downstream Pressure Ranges

For the following downstream pressures, three color-coded springs are available. Where the pressures overlap, use the lowest pressure spring to give the downstream pressure required:

<b>Grey:</b> 2 to 25 psig 0.14 to 1.7 barg	<b>Green:</b> 20 to 60 psig 1.4 to 4.0 barg	<b>Orange:</b> 50 to 125 psig 3.5 to 8.6 barg
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### Pressure/temperature limits



### Dimensions (nominal) in inches and millimeters

Size	A	C	D	E Withdrawal Distance	Weight
1/2"	3.3	2.4	5.1	1.0	3.3 lb
	83	62	130	25	1.5 kg
3/4"	3.8	2.4	5.1	1.0	3.5 lb
	96	62	130	25	1.6 kg
1"	4.3	2.4	5.1	1.0	3.8 lb
	108	62	130	25	1.7 kg

Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.

In the interests of development and improvement of the product, we reserve the right to change the specification.

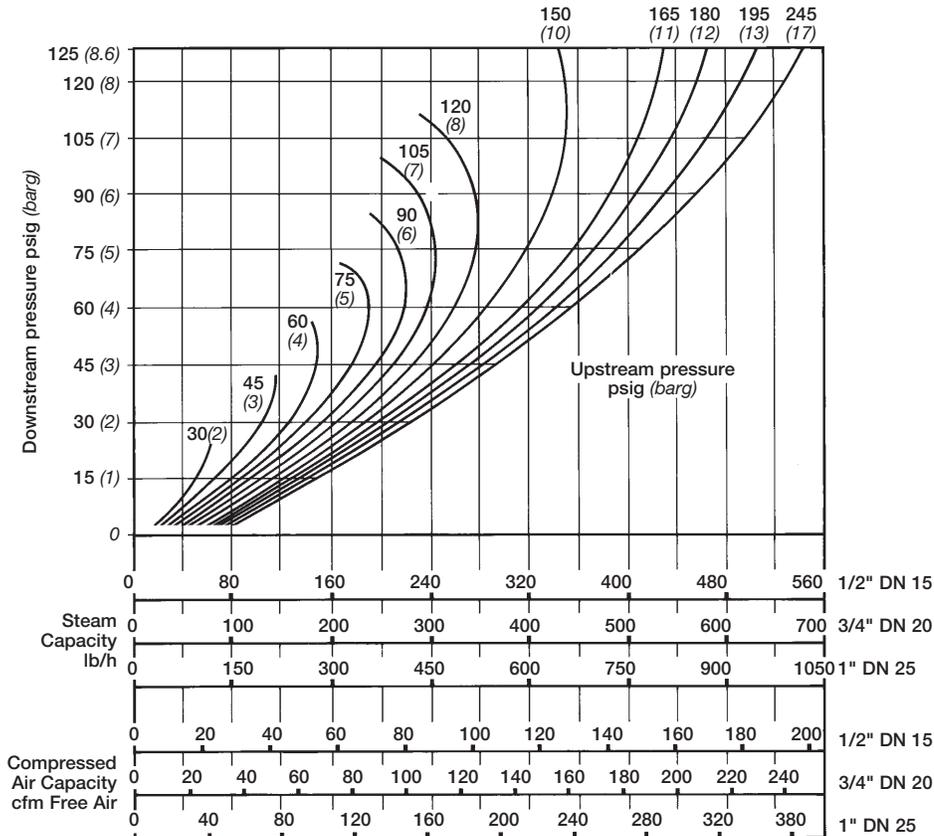
TI-3-108-US 03.14

# Stainless Steel Direct Operated Pressure Regulator SRV2S

**Capacities** – Saturated steam capacities in lb/h

Full lift capacities for safety valve sizing are shown below:

	1/2" (DN15)	3/4" (DN20)	1" (DN25)
$Cv_s$ (Kv)	1.8 (1.5)	2.9 (2.5)	3.5 (3.0)



## How to use the chart

The curved lines labelled 30, 45, 60, etc., represent upstream pressures. Downstream pressures are read along the vertical line on the left hand side of the chart.

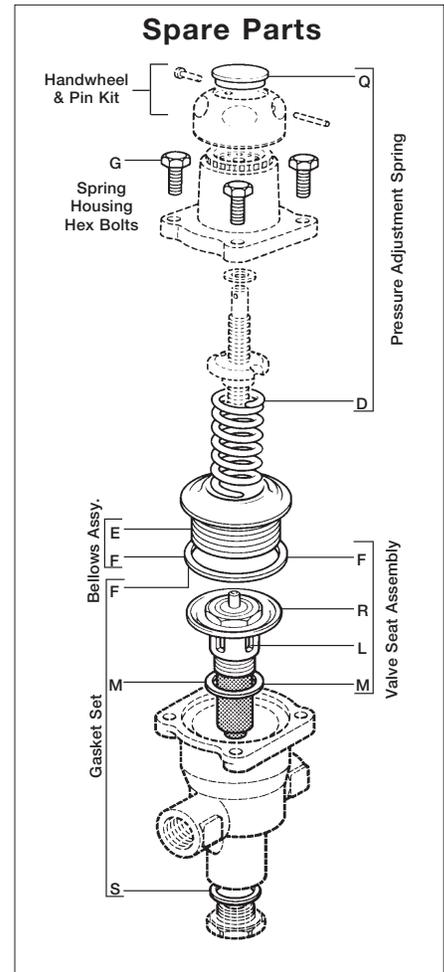
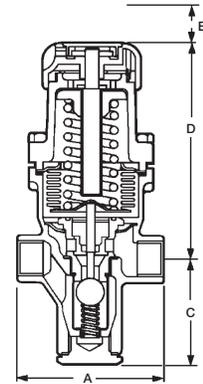
**Example:** Required, a reducing valve to pass 160 lb/h reducing from 150 to 60 psi. From the downstream pressure of 60 on the left hand side of the chart extend out horizontally until the line meets the curved 150 psi upstream line. At this point, read vertically downward where it will be seen that 1/2" SRV2S will be required

## Installation and Maintenance

The valve should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the valve body. When the required set pressure has been achieved, the tamper proof pin may be used to prevent further pressure adjustments. Any strainer fitted upstream of the SRV2S, and the strainer screen fitted inside the valve should be cleaned regularly so that the flow to the valve is not restricted. Full Installation and Maintenance Instructions are supplied with each product. (IM-P186-03)

## Sample Specifications

Pressure reducing valve shall be direct operated type with all 316L wetted parts. Reduced pressure shall be adjustable, by hand, and a tamper proof device included to prevent further adjustment.



### Spare Parts

Valve and seat assembly	F, R, L, M
* Bellows (Stainless Steel)	E, F
* Spring Housing Hex Bolts (set of 4)	G
* Pressure Adjustment Spring	D, Q
Grey 2/25 psig	
Green 20/60 psig	
Orange 50/125 psig	
* Set of all gaskets	F, M, S
* Common to all sizes.	

Only parts listed are available as spares. Always state valve size when ordering spare parts.

TI-3-108-US 03.14