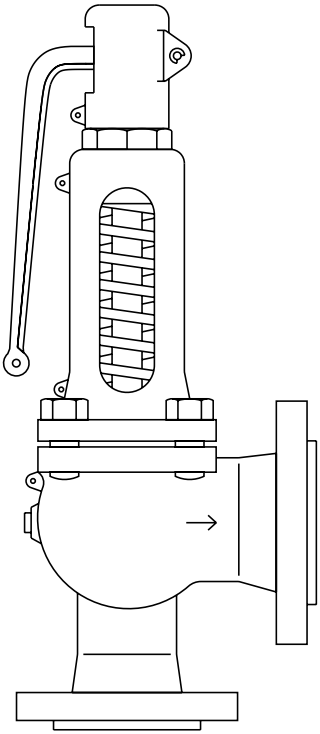
IM-P317-01
CH Issue 11

spirax sarco

# SV60 and SV60H Safety Valves

Installation and Maintenance Instructions



# 1. Safety information

**Safe operation of the unit can only be guaranteed if it is properly installed, commissioned and maintained by a qualified person (see Section 1.11) in compliance with the operating instructions. General installation and safety instructions for pipeline and plant construction, as well as the proper use of tools and safety equipment must also be complied with.**

## 1.1 Intended use

**Referring to these Installation and Maintenance Instructions, Name-plate and Technical Information Sheet, check that the product is suitable for the intended use/application. The SV60 safety valve range complies with the requirements of the European Pressure Equipment Directive 97/23/EC and carry the CE mark. They fall within Category 4 for Group 2 Gases.**

i) **The product has been specifically designed for use on steam, air, inert industrial gases and liquids which are in Group 2 of the above mentioned Pressure Equipment Directive. The product's use on other fluids may be possible but, if this is contemplated, Spirax Sarco should be contacted to confirm the suitability of the product for the application being considered.**

ii) **Check material suitability, pressure and temperature and their maximum and minimum values. If the maximum operating limits of the product are lower than those of the system in which it is being fitted, or if malfunction of the product could result in a dangerous overpressure or overtemperature occurance, ensure a safety device is included in the system to prevent such over-limit situations.**

iii) **Determine the correct installation situation and direction of fluid flow.**

iv) **Spirax Sarco products are not intended to withstand external stresses that may be induced by any system to which they are fitted. It is the responsibility of the installer to consider these stresses and take adequate precautions to minimise them.**

v) **Remove protective covers from all connections and protective film from all name-plates, where appropriate, before installation on steam or other high temperature applications.**

## 1.2 Access

**Ensure safe access and if necessary a safe working platform (suitably guarded) before attempting to work on the product. Arrange suitable lifting gear if required.**

## 1.3 Lighting

**Ensure adequate lighting, particularly where detailed or intricate work is required.**

## 1.4 Hazardous liquids or gases in the pipeline

**Consider what is in the pipeline or what may have been in the pipeline at some previous time. Consider; flammable materials, substances hazardous to health, extremes of temperature.**

## 1.5 Hazardous environment around the product

**Consider; explosion risk areas, lack of oxygen (e.g. tanks, pits), dangerous gases, extremes of temperature, hot surfaces, fire hazard (e.g. during welding), excessive noise, moving machinery.**

## 1.6 The system

**Consider the effect on the complete system of the work proposed. Will any proposed action (e.g. closing isolation valves, electrical isolation) put any other part of the system or any personnel at risk?**
**Dangers might include isolation of vents or protective devices or the rendering ineffective of controls or alarms. Ensure isolation valves are turned on and off in a gradual way to avoid system shocks.**

## 1.7 Pressure systems

**Ensure that any pressure is isolated and safely vented to atmospheric pressure. Consider double isolation (double block and bleed) and the locking or labelling of closed valves. Do not assume that the system has depressurised even when the pressure gauge indicates zero.**

## 1.8 Temperature

**Allow time for temperature to normalise after isolation to avoid danger of burns.**

## 1.9 Tools and consumables

**Before starting work ensure that you have suitable tools and/or consumables available. Use only genuine Spirax Sarco replacement parts.**

## 1.10 Protective clothing

**Consider whether any protective clothing is required by yourself and/or others in the vicinity to protect against the hazards of, for example, chemicals, high/low temperature, noise, falling objects, and dangers to eyes and face.**

## 1.11 Permits to work

**All work must be carried out or be supervised by a suitably competent person. Installation and operating personnel should be trained in the correct use of the product according to these instructions.**
**Where a formal 'permit to work' system is in force it must be complied with. Where there is no such system, it is recommended that a responsible person should know what work is going on and, where necessary, arrange to have an assistant whose primary responsibility is safety.**
**Post 'warning notices' if necessary.**

## 1.12 Handling

**Where the weight of the product exceeds 20 kg it is recommended that suitable lifting equipment is used to prevent personal injury.**

## 1.13 Residual hazards

**In normal use the external surface of the product may be very hot. If used at the maximum permitted operating conditions the surface temperature of some products may reach temperatures in excess of 200°C.**
**Many products are not self-draining. Take due care when dismantling or removing the product from an installation (refer to Section 11, 'Maintenance').**

## 1.14 Freezing

**Provision must be made to protect products which are not self-draining against frost damage if they are inoperative in environments where they may be exposed to temperatures below freezing point.**

## 1.15 Safety information - Product specific

**This product should not be dismantled without first releasing the compression on the control spring.**

**This valve may contain a Viton component. If the valve has been subjected to a temperature approaching 315°C, the Viton material may have decomposed and formed hydroflouric acid. Avoid skin contact and inhalation of any dust or fumes as this acid causes deep burns and damage to the respiratory system.**

## 1.16 Disposal

**Unless otherwise stated in the Installation and Maintenance Instructions, this product is recyclable and no ecological hazard is anticipated with its disposal providing due care is taken. However, if the valve is fitted with a Viton seat, special care must be taken to avoid potential health hazards associated with decomposition / burning of these seats.**

### Viton:

- **Can be landfilled, when in compliance with National and Local regulations.**
- **Can be incinerated, but a scrubber must be used to remove Hydrogen Fluoride, which is evolved from the product and with compliance to National and Local regulations.**
- **Is insoluable in aquatic media.**

## 1.17 Returning products

**Customers and stockists are reminded that under UK and EC Health, Safety and Environment Law, when returning products to Spirax Sarco they must provide information on any hazards and the precautions to be taken due to contamination residues or mechanical damage which may present a health, safety or environmental risk. This information must be provided in writing including Health and safety data sheets relating to any substances identified as hazardous.**

# 2. Product information

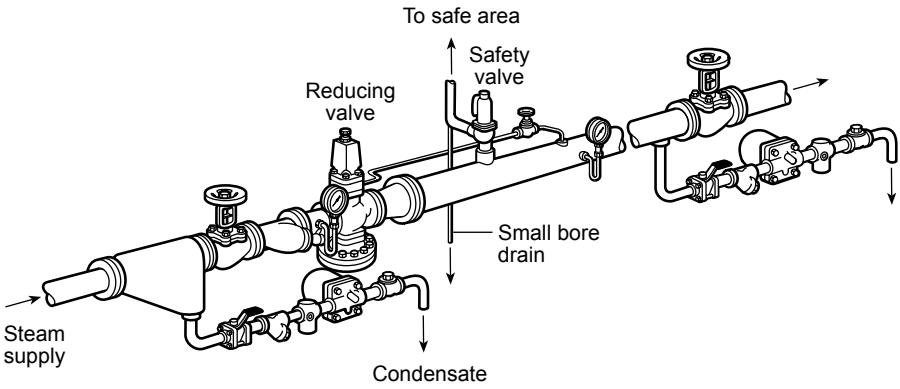



**Fig. 1 Typical installation of safety valve, downstream of pressure reducing valve station**

## 2.1 Description

The SV60 is a range of full lift flanged safety valves suitable for use on steam, inert industrial gas and water services.
The SV60 is suitable for the following applications; protection of steam boilers, pipelines and pressure vessels, compressors and receivers and for most general process industry applications.
The SV60H is suitable for use only on hot water boilers in accordance with DIN 4571.

### Available types

There are two body material variations for these valves

| | |
|---|---|
| **SV607** and **SV607H** | SG iron |
| **SV604** and **SV604H** | Carbon steel |

### Inlet sizes range from DN20 to DN150

The **SV607** and **SV604** are available with the option of easing lever and open or closed bonnets.

The **SV607H** and **SV604H** have an easing lever and closed bonnet as standard. Open bonnet and sealed cap are not available for the '**H**' version.

### Standards and approvals

All valves carry the CE mark and comply with the requirements of the European Pressure Equipment Directive 97/23/EC and fall within Category 4 for Group 2 gases.

The **SV604** is approved by the TÜV to AD-Merkblatt A2, AD-Merkblatt A4, TRD 721, Vd TÜV 100 and 100/4. Seat tightness to ASME/API standard 527-1992. Also Lloyds Register (LR) type approval, Certificate No. 01/00125 (E2).

The **SV607H** and **SV604H** are approved by the TÜV to TRD 721 and Vd TÜV Merkblatt SV100 and 100/4.

### Certification

A manufacturers' Typical Test Report is provided as standard for each valve which will include the valve set and hydraulic test pressure. Also available on request is material certification in accordance with EN 10204 3.1.

## 2.2 Sizes and end connections

Inlet sizes include DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN100, DN125 and DN150.

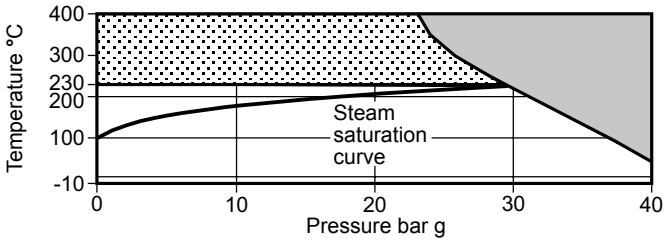
| Valve type | Inlet connection | Outlet connection |
|---|---|---|
| **SV607 and SV607H** | PN16 (DN65 to DN150 only) | PN16 |
| | PN25 | PN16 |
| **SV604 and SV604H** | PN40 | PN16 |
| **SV604** | ASME 300 | ANSI 150 |

Standard PN flanges are to EN 1092 and ASME 300 to EN 1759-1.
The body drain connection is ½" BSP.

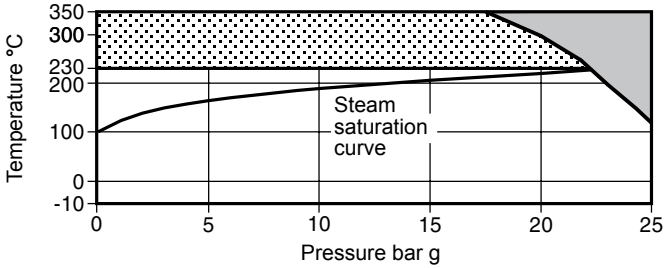
## 2.3 Pressure / temperature limits - SV604 and SV607

**(see page 8 for the SV604H and SV607H pressure / temperature limits)**

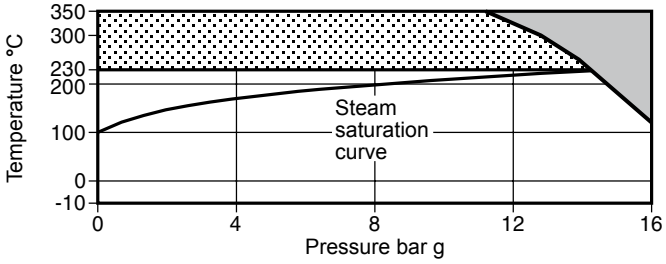
**SV604 PN40 inlet**




**SV607 PN25 inlet**




**SV607 PN16 inlet**




The product **must not be** used in this region.

A tungsten alloy spring **must be used** in this region.
Consult Spirax Sarco for further information.

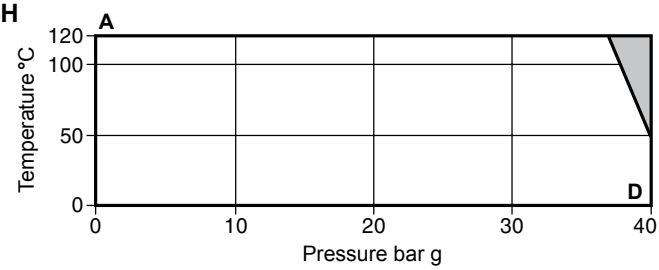
| | | | | | | |
|---|---|---|---|---|---|---|
| Body design conditions | | **SV604** | | | | PN40 |
| | | **SV607** | | | | PN16 or PN25 |
| Set pressure maximum | | **SV604** | PN40 | **Size** | **Saturated steam** | **Air** | **Water** |
| | | | | DN20 x DN32 | 29 bar g | 40 bar g | 40 bar g |
| | | | | DN25 x DN40 | 29 bar g | 40 bar g | 40 bar g |
| | | | | DN32 x DN50 | 29 bar g | 40 bar g | 40 bar g |
| | | | | DN40 x DN65 | 29 bar g | 40 bar g | 40 bar g |
| | | | | DN50 x DN80 | 29 bar g | 40 bar g | 40 bar g |
| | | | | DN65 x DN100 | 29 bar g | 32 bar g | 32 bar g |
| | | | | DN80 x DN125 | 29 bar g | 32 bar g | 32 bar g |
| | | | | DN100 x DN150 | 25 bar g | 25 bar g | 25 bar g |
| | | | | DN125 x DN200 | 20 bar g | 20 bar g | 20 bar g |
| | | | | DN150 x DN250 | 16 bar g | 16 bar g | 16 bar g |
| | | **SV607** | PN25 | DN20 x DN32 | 22.5 bar g | 25 bar g | 25 bar g |
| | | | | DN25 x DN40 | 22.5 bar g | 25 bar g | 25 bar g |
| | | | | DN32 x DN50 | 22.5 bar g | 25 bar g | 25 bar g |
| | | | | DN40 x DN65 | 22.5 bar g | 25 bar g | 25 bar g |
| | | | | DN50 x DN80 | 22.5 bar g | 25 bar g | 25 bar g |
| | | | | DN65 x DN100 | 22.5 bar g | 25 bar g | 25 bar g |
| | | | | DN80 x DN125 | 22.5 bar g | 25 bar g | 25 bar g |
| | | | | DN100 x DN150 | 22.5 bar g | 25 bar g | 25 bar g |
| | | | | DN125 x DN200 | 20 bar g | 20 bar g | 20 bar g |
| | | | | DN150 x DN250 | 14.6 bar g | 16 bar g | 16 bar g |
| | | | PN16 | DN65 x DN100 | 14.6 bar g | 16 bar g | 16 bar g |
| | | | | DN80 x DN125 | 14.6 bar g | 16 bar g | 16 bar g |
| | | | | DN100 x DN150 | 14.6 bar g | 16 bar g | 16 bar g |
| | | | | DN125 x DN200 | 14.6 bar g | 16 bar g | 16 bar g |
| | | | | DN150 x DN250 | 14.6 bar g | 16 bar g | 16 bar g |
| Set pressure minimum | | **SV604** | | | | | 0.2 bar g |
| | | **SV607** | | | | | 0.2 bar g |
| Temperature | Maximum | **SV604** | | | | | 400°C |
| | | **SV607** | | | | | 350°C |
| | Minimum | | | | | | -10°C |
| Performance data | | Overpressure | | Steam and gas | | | 5% |
| | | | | Liquids | | | 10% |
| | | Blowdown limit | | Steam and gas | | | 10% |
| | | | | Liquids | | | 20% |
| | | Backpressure limit | | | | | Up to 10% of set pressure |
| Designed for a maximum inlet cold hydaulic test pressure of: | | **SV604** | | | | | 60 bar g |
| | | **SV607** | | PN25 | | | 38 bar g |
| | | | | PN16 | | | 24 bar g |

## 2.4 Pressure / temperature limits - SV604H and SV607H

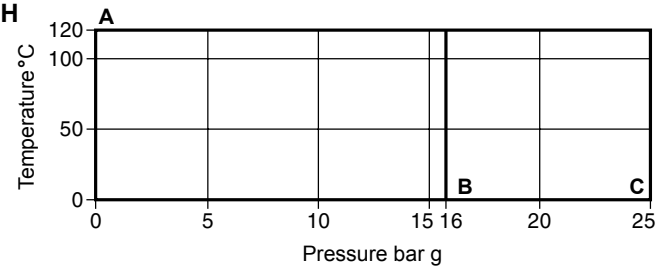
**(see pages 6 and 7 for the SV604 and SV607 pressure / temperature limits)**

Please contact Spirax Sarco, when so required, for relevant details regarding the maximum allowable limits that the shell can withstand.

**SV604H**




**SV607H**




The product **must not** be used in this region.

**A - B** Flanged PN16.
**A - C** Flanged PN25.
**A - D** Flanged PN40.

| | | | |
|---|---|---|---|
| Body design conditions | **SV604H** | | PN40 |
| | **SV607H** | | PN16 or PN25 |
| Set pressure range | Maximum | | 10 bar g |
| | Minimum | | 1 bar g |
| Temperature | EPDM seat | Minimum | 5°C |
| | | Maximum | 120°C |
| | Viton seat | Minimum | 5°C |
| | | Maximum | 120°C |
| Performance data | Overpressure | | 10% |
| | Blowdown limit | | 10% of set pressure |
| | Derated coefficient of discharge values | | 0.5 |
| | Backpressure limit | | Up to 10% of set pressure |
| Designed for a maximum inlet cold hydraulic test pressure of: | | PN40 | 60 bar g |
| | | PN25 | 38 bar g |
| | | PN16 | 24 bar g |

## 2.5 Dimensions / weights (approximate) in mm and kg

| Size Inlet / Outlet | Dimensions | | | | Weight | |
|---|---|---|---|---|---|---|
| | A | B | C | Flow Ø D | SV604 SV604H | SV607 SV607H |
| **DN20 - DN32** | 85 | 95 | 385 | 17.0 | 10.5 | 10.5 |
| **DN25 - DN40** | 100 | 105 | 435 | 23.8 | 12.5 | 11.5 |
| **DN32 - DN50** | 110 | 115 | 450 | 30.6 | 16.0 | 15.0 |
| **DN40 - DN65** | 115 | 140 | 520 | 38.0 | 18.0 | 18.0 |
| **DN50 - DN80** | 120 | 150 | 535 | 50.1 | 20.0 | 22.0 |
| **DN65 - DN100** | 140 | 170 | 710 | 59.0 | 40.0 | 38.0 |
| **DN80 - DN125** | 160 | 195 | 790 | 73.0 | 56.0 | 53.0 |
| **DN100 - DN150** | 180 | 220 | 835 | 91.0 | 77.0 | 75.0 |
| **DN125 - DN200** | 200 | 250 | 1 042 | 105.0 | 120.0 | 115.0 |
| **DN150 - DN250** | 225 | 285 | 1 165 | 125.0 | 190.0 | 180.0 |

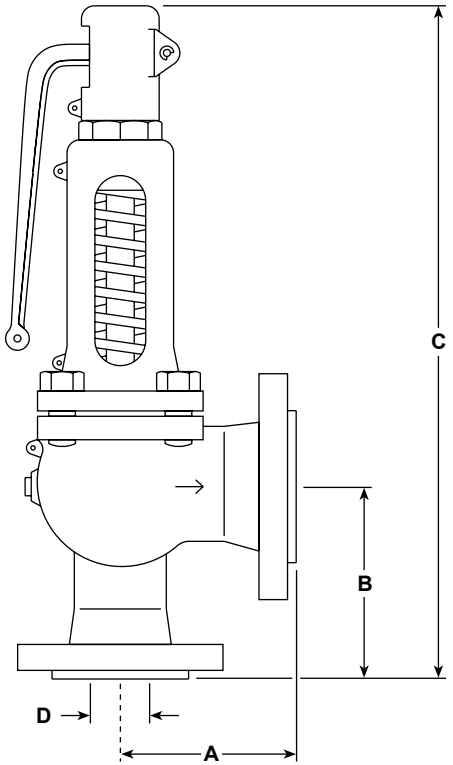
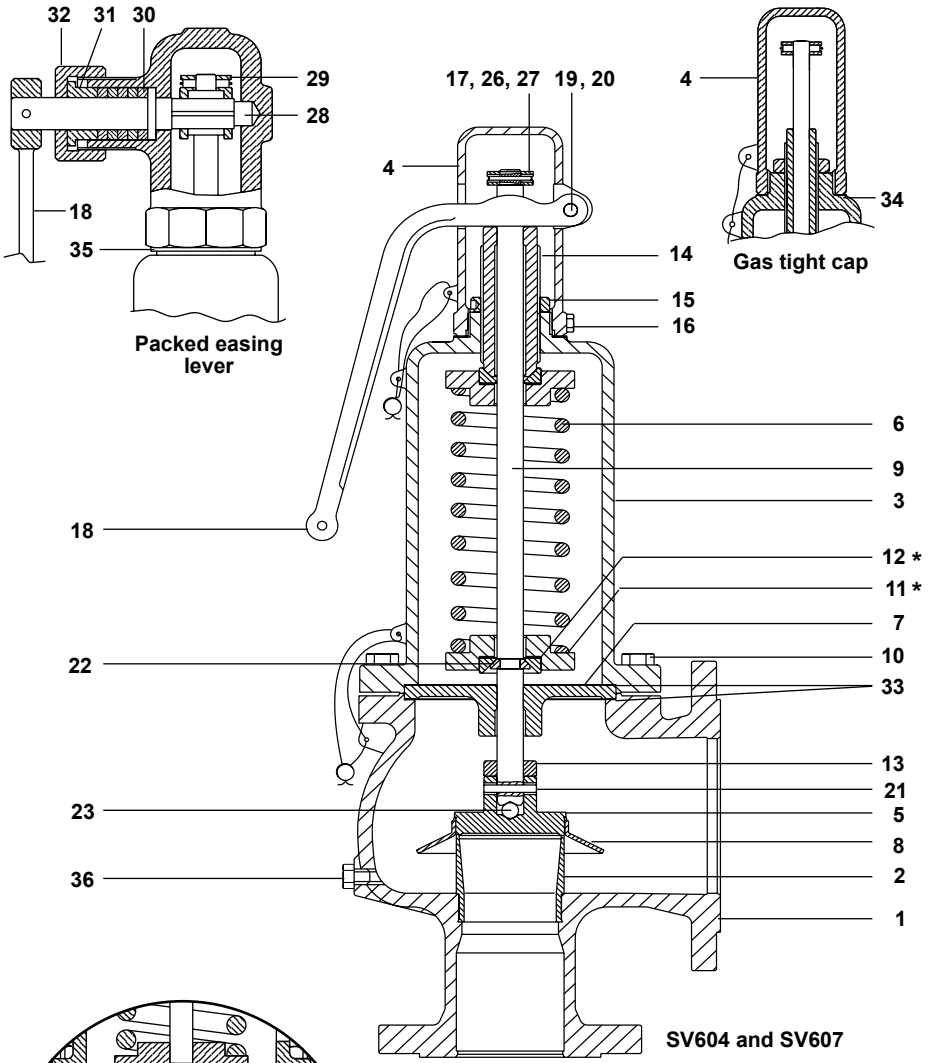



**Fig. 2**

## 2.6 Materials

| No. | Part | | | Material | |
|---|---|---|---|---|---|
| 1 | Body | **SV604** | | Carbon steel | 1.0619 + N |
| | | **SV607** | | SG iron | GJS-400-18LT |
| 2 | Seat | | DN20 - DN100 | Stainless steel | 1.4057 |
| | | | DN125 - DN150 | Stainless steel | ANC2 |
| 3 | Bonnet | **SV604** | | Carbon steel | 1.0619 + N |
| | | **SV607** | | SG iron | GJS-400-18LT |
| 4 | Cap | | | SG iron | GJS-400-15 |
| 5 | Disc | **SV604** and **SV607** | DN20 - DN100 | Stainless steel | 1.4021 |
| | | | DN125 - DN150 | Stainless steel | CA15 |
| | | **SV604H** and **SV607H** | DN20 - DN125 | Stainless steel | 1.4021 |
| | | | DN150 | Stainless steel | CA15 |
| 6 | Spring | Standard | | Chrome-vanadium alloy steel | |
| | | For temperatures above 230°C | | Tungsten alloy steel | |
| 7 | Guide plate | | | SG iron | GJS-400-15 |
| 8 | Skirt | | DN20 - DN100 | Stainless steel | 1.4301 |
| | | | DN125 - DN150 | Stainless steel | 1.4308 |
| 9 | Stem | | | Stainless steel | 1.4021 |
| 10 | Body bolts | | | Steel | CK35 |
| * 11 | Spring plate | | | Carbon steel | C45E |
| * 12 | Bearing ring | | DN80 - DN150 only | Stainless steel | 1.4021 |
| 13 | Spacer | | | Stainless steel | 1.4021 |
| 14 | Adjustment screw | | | Stainless steel | 1.4021 |
| 15 | Lock-nut | | | Zinc plated carbon steel | |
| 16 | Cap bolt | | | Zinc plated steel | |
| 17 | Collar | | | Zinc plated carbon steel | |
| 18 | Lever | | | SG iron | GJS-400-15 |
| 19 | Lever pin | | | Zinc plated carbon steel | |
| 20 | Circlip (not shown) | | | Spring steel | |
| 21 | Stem pin | | | Spring steel | DIN 7343, A304 |
| 22 | Collets | | | Stainless steel | 1.4021 |
| 23 | Stem ball | | | Stainless steel | |
| 26 | Collar pin | | | Zinc plated carbon steel | |
| 27 | Collar circlip | | | Spring stainless steel | |
| 28 | Packed lever spindle | | | Stainless steel | ASTM A276 431 |
| 29 | Lifting fork | | | Carbon steel | |
| 30 | Gland packing | | | Graphite | |
| 31 | Gland | | | Stainless steel | ASTM A276 304 |
| 32 | Gland nut | | | Carbon steel | |
| 33 | Guide plate gaskets (2 off) | | | Reinforced exfoliated graphite | |
| 34 | Sealed cap gasket | | | Universal SA | |
| 35 | Packed lever cap gasket | | | Universal SA | |
| 36 | Body drain plug (½" BSP) | | | Steel | |
| 43 | Bellows | | | EPDM | **These parts are for the SV60_H safety valve only** |
| 44 | Hose clamp | | | Stainless steel | |
| 45 | 'O' ring | | | EPDM / Viton | |
| 46 | Nut | | | Stainless steel | |




* **Note:** The spring plate (**11**) and bearing ring design (**12**) varies according to the valve size and set pressure. **Please refer** to IM-S13-35 for further details.

**Fig. 3**

## 2.7 How to select the SV60 and SV60H safety valve:

| | | |
|---|---|---|
| **Model type** | | **SV60** |
| **Body material** | 4 = Carbon steel<br>7 = SG iron<br>4H = Carbon steel<br>7H = SG iron | **4** |
| **Configuration** | A = Closed bonnet/easing lever<br>*B = Closed bonnet/gas tight cap<br>*C = Closed bonnet/packed easing lever<br>*D = Open bonnet/easing lever<br>***Note:** B, C and D apply to the SV604 and SV607 only | **A** |
| **Seal material** | S = Stainless steel with chrome-vanadium alloy steel spring (SV604 and SV607 only)<br>T = Stainless steel with tungsten alloy steel spring (SV604 and SV607 only)<br>E = EPDM (SV604H and SV607H only)<br>V = Viton (SV604H and SV607H only) | **S** |
| **Size** | DN20 to DN150 | **DN20** |
| **Inlet connection** | PN16 (DN65 to DN150 only), PN25 or PN40<br>ASME 300 (SV604 only) | **PN40** |

**Selection example**

| SV60 | 4 | A | S | DN20 | PN40 |
|---|---|---|---|---|---|

### How to order a new product

**Example:** 1 off Spirax Sarco SV604AS, DN20 flanged PN40 safety valve with a set pressure of 6 bar.

# 3. Supply

Normally, the valve will be supplied set at the required pressure and sealed.
Setting of Spirax Sarco safety valves must only be carried out by authorised, competent persons. Spirax Sarco accepts no responsibility for valves which have been reset by unauthorised personnel.

# 4. Handling

**4.1** Valves should be transported in the upright position.

**4.2** **Do not drop** and avoid sudden shocks or heavy impacts.

**4.3** Always store in the suppliers packaging until required.

**4.4** **Never** carry a safety valve by the lifting lever.

# 5. Before fitting the valve

**5.1** Ensure that the installation is correct (See example on Figure 1, page 5).

**5.2** Check that the details on the safety valve name-plate are compliant with the installation and process.

**5.3** Blow through the pipework to ensure that it is completely free of any foreign matter that may otherwise pass to the valve seat and cause damage, leading to seat leakage. Blowdown must be carried out before installing the safety valve.

**5.4** Ensure that valve is set to the correct pressure, see 'Testing during use', Section 9.

**5.5** Remove protective caps and seal.

**5.6** Remove any plastic securing straps from the lever.

# 6. Installation

**Note: Before actioning any installation observe the 'Safety information' in Section 1.**

**6.1** The valve should always be mounted vertically upwards with its main axis vertical.

**6.2** The valve should be fitted to the pipework or vessel by means of the shortest possible length of pipe or fitting.

**6.3** There should be no intervening valve or fitting i.e. it should not be possible to isolate the safety valve (see Figure 4).

**6.4** The inlet pipe connection should not be smaller than the valve (see Figures 7 and 8, page 16).

**6.5** The outlet pipe size should be equal or larger than the valve outlet to keep backpressure below 10% of the set pressure. **Use long radius bends and fittings.**

**6.6** Direct the outlet pipework to a safe point of discharge where there is no risk of injury to persons or damage to property in the event of the valve operating.

**6.7** The outlet pipework should be adequately supported such that it does not place undue stress on the safety valve.

**6.8** Where the outlet pipework is directed upwards (i.e. on steam service), a small bore drain should be provided at the lowest point (Figure 5). This drain should be taken to a place where any discharge will not create a hazard or inconvenience.

**6.9** For installation where condensate is likely to accumulate in the valve body, it is recommended that the ½" BSP body drain connection (Item 36, page 11) is piped to a safe drainage point.

**6.10** Each safety valve should have its own unrestricted discharge pipe.

**6.11** Safety valves with open bonnets may release fluid under pressure when discharging. Ensure this can be done safely.

**6.12** Safety valve lagging should be limited to the body only.

**6.13** Safety valves can operate very suddenly and will be too hot to touch without protection when installed on steam systems.

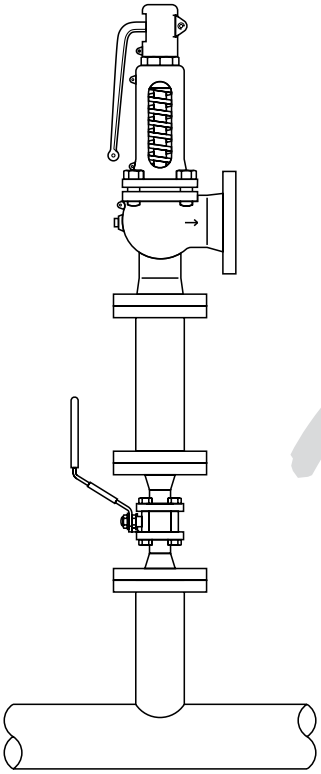


**Fig. 4**

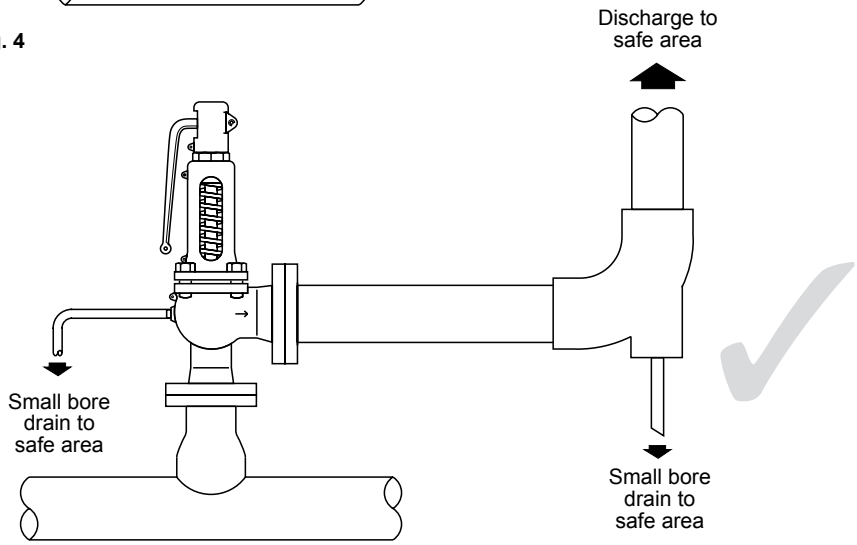

Discharge to
safe area
Small bore
drain to
safe area
Small bore
drain to
safe area

**Fig. 5**

# 7. Damage prevention

Excessive pressure loss at the inlet of a safety valve when it relieves will cause extremely rapid opening and closing of the valve, observed as chattering or hammering.
This may result in reduced capacity as well as damage to seating faces and the other parts of the safety valve.
When normal pressure is restored it is possible that the safety valve will leak.

## 7.1 Solution

Pressure loss at inlet should be no more than 3% of pressure differential between set pressure and superimposed backpressure when discharging.
The safety valve should be fitted 8-10 pipe diameters downstream of converging, diverging fittings or bends (Figure 6).
Inlet branches should be as Figures 7 and 8.

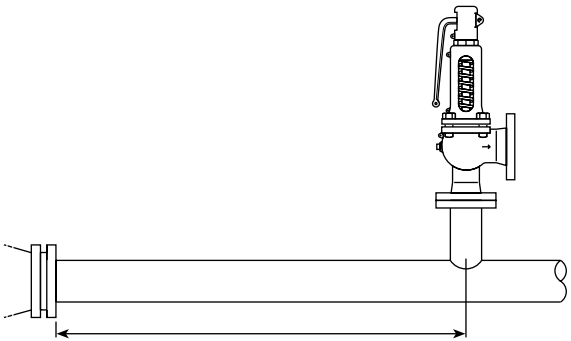



**Fig. 6**

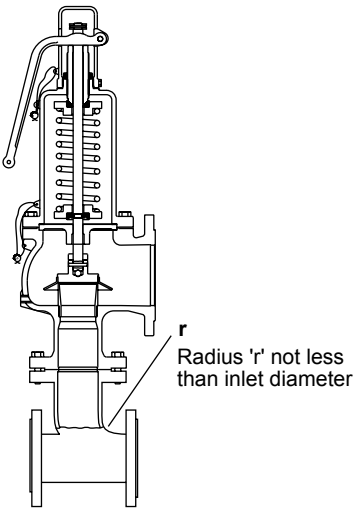



**Fig. 7**

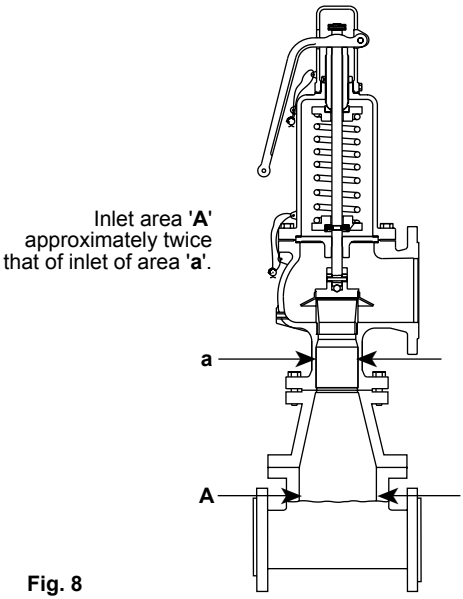



**Fig. 8**

# 8. Commissioning

**8.1** Once the safety valve has been fitted check that there are no leaks from either the inlet or the outlet connections.

**8.2** Test the valve by raising the system pressure. Check that the safety valve operates at the correct set pressure.

**8.3** Reduce the system pressure to the normal operating pressure and check that the safety valve reseats.

# 9. Testing during use

**9.1** It is recommended that the safety valve be tested for correct operation on a regular basis as part of a documented and controlled procedure, the frequency of testing is dependant on the application and system conditions and an appropriate test interval must be decided by the user or relevant insurance company.

**Note:** Use suitable protection against excess heat and noise when testing safety valves.

**9.2** Some valves are fitted with standard (open type) or packed easing levers to enable testing for correct operation during use.
**Do not** operate the lever unless the system pressure is at least 85% of the safety valve set pressure.
**Do not** use any tool or mechanical device (e.g. length of pipe) on the lever. **Do not** apply excessive force - **Hand operation only**.

# 10. Guidelines for setting
## (By authorised and competent persons only)

### 10.1 Choice of set pressure
A decision must be made regarding the pressure at which the safety valve should be set. The maximum set pressure, in accordance with BS 5500, is the safe working pressure of the plant it protects and the valve must achieve its rated capacity with an overpressure of no more than 10%.
The SV60 achieves its rated capacity at 5% over pressure (10% for the SV60H). If the valve is set too close to the operating pressure of the system the valve may operate prematurely. It will also fail to close satisfactorily when normal operating pressure is restored.
Figure 9 outlines the way a safety valve operates.

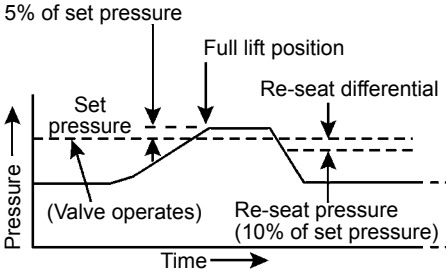



**Fig. 9**

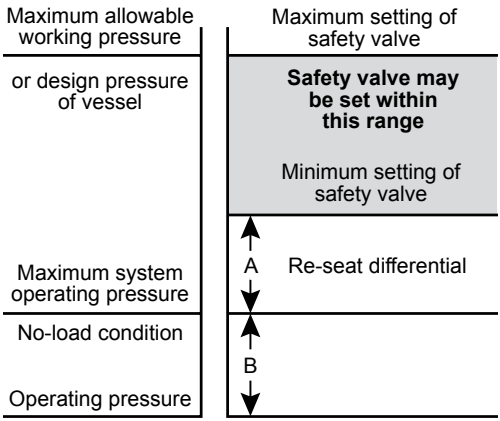
It can be seen that the safety valve does not re-seat when the pressure falls to the safety valve set pressure.
There must be adequate differential between the maximum system operating pressure and the safety valve set pressure if the valve is to re-seat.
The maximum system operating pressure is most likely to occur during no-load conditions. Figure 10 shows the range within which the valve must be set.

**Fig. 10**

Flowrate = Maximum rating of pressure reducing valve

A = 10% of safety valve set pressure, 0.3 bar minimum
B = Normal system pressure variation

**Note:** The operating pressure of a system will vary and it is important that the safety valve is set high enough to accommodate such fluctuations.




### 10.2 Setting the valve
Spirax Sarco cannot be held responsible for unauthorised alteration of the set pressure.

### 10.3 Valves supplied unset
Valves supplied unset to approved agents will include a set pressure tag to be stamped with the appropriate set pressure in bar after setting.
The tag should be permanently attached to the valve with locking wire and lead seal. The back of the blue instruction label affixed to each unset valve will indicate the pressure range of the spring fitted.

# 11. Maintenance

**All safety valves should receive planned maintenance.**

**Note: Before actioning any maintenance work please read 'Safety information', Section 1.**

It is recommended that the Spirax Sarco SV60 safety valves are returned to Spirax Sarco, or an approved Spirax Sarco agent, for a thorough overhaul periodically, please read 'Returning products', Section 1.17.
The valve will be returned having been overhauled, tested re-set and sealed in accordance with industry standard procedures.