



# S7 Carbon Steel Separator DN65 to DN350

## Description

The S7 is a carbon steel baffle type separator for the efficient removal of entrained liquids from steam, air and gas systems. A suitable steam trap (FT) or liquid drainer (CA) is required to drain the collected condensate/liquid depending on the application:

**For steam service** fit an FT ball float steam trap and AV air vent

**For air / gas service** fit a CA ball float liquid drainer

## Standards

This product fully complies with the requirements of the Indian Boiler Regulations, 1950.

## Certification

This product is available with a manufacturers 'Typical Test Report and IBR Certification'

**Note:** All certification / inspection requirements must be stated at the time of order placement.

## Sizes and pipeline connections

DN65, DN80, DN100, DN125, DN150, DN200, DN250, DN300 and DN350.

Flanged ASME B16.5 Class 150 and 300 with screwed NPT vent and drain connections.

Screwed, socket weld and other connections are available to special order – consult Spirax Sarco.

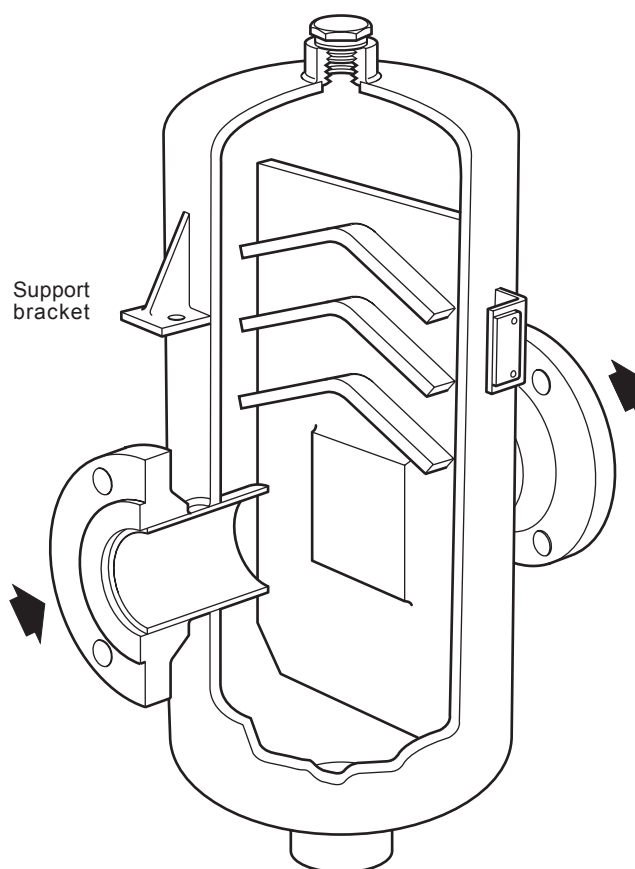
## Materials

All components of the S7 are manufactured from carbon steel.

## Pressure / temperature limits

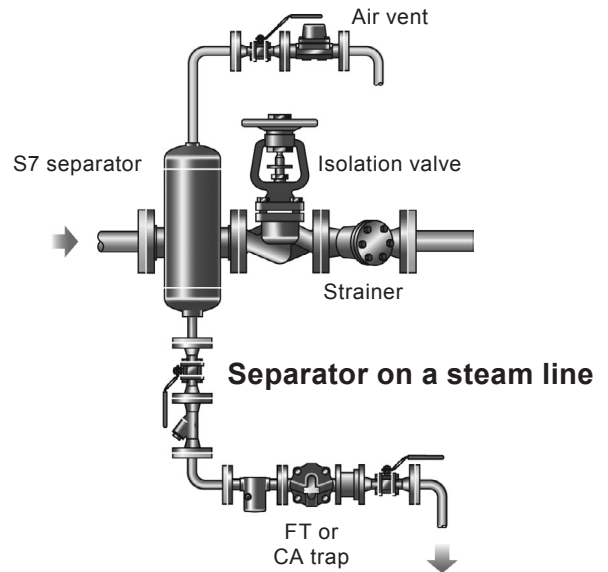
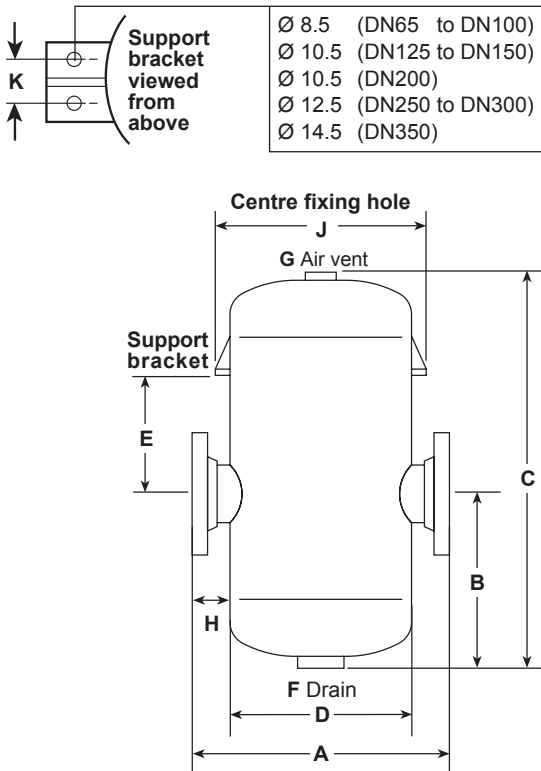
| Size          | Flange standard | Design pressure bar g | Design temperature °C | Designed for a maximum cold hydraulic test pressure of: bar g |
|---------------|-----------------|-----------------------|-----------------------|---|
| DN65 to DN350 | ASME 150        | 20                    | 213                   | 30.0  |
|               | ASME 300        | 25                    | 225                   | 37.5  |

**Please note:** For pressures and temperatures that exceed these operating conditions please contact Spirax Sarco for a quotation.



## Dimensions, weight and volume (approximate) in mm, kg and litres

| Size  | Design pressure (bar g) | A    | B     | C    | D     | E     | F  | G  | H     | J     | K   | Weight | Volume |
|-------|-------------------------|------|-------|------|-------|-------|----|----|-------|-------|-----|--------|--------|
| DN65  | 20                      | 420  | 266.4 | 638  | 219   | 152.3 | 1" | ¾" | 100.5 | 319.1 | 30  | 38     | 14     |
|       | 25                      | 420  | 266.4 | 638  | 219   | 152.3 | 1" | ¾" | 100.5 | 319.1 | 30  | 38     | 14     |
| DN80  | 20                      | 489  | 350.5 | 735  | 273   | 166.3 | 1" | ¾" | 107.9 | 373.1 | 30  | 58     | 31     |
|       | 25                      | 489  | 350.5 | 735  | 273   | 166.3 | 1" | ¾" | 107.9 | 373.1 | 30  | 58     | 31     |
| DN100 | 20                      | 574  | 358.1 | 795  | 324   | 133.3 | 2" | ¾" | 125   | 423.9 | 40  | 83     | 48     |
|       | 25                      | 574  | 358.1 | 795  | 324   | 133.3 | 2" | ¾" | 125   | 423.9 | 40  | 83     | 48     |
| DN125 | 20                      | 656  | 358.1 | 843  | 406.4 | 178.7 | 2" | ¾" | 124.8 | 506.4 | 44  | 118    | 66     |
|       | 25                      | 656  | 358.1 | 843  | 406.4 | 178.7 | 2" | ¾" | 124.8 | 506.4 | 44  | 118    | 66     |
| DN150 | 20                      | 706  | 426.2 | 935  | 457.2 | 166.5 | 2" | ¾" | 124.4 | 567.2 | 60  | 154    | 110    |
|       | 25                      | 706  | 426.2 | 935  | 457.2 | 166.5 | 2" | ¾" | 124.4 | 567.2 | 60  | 154    | 110    |
| DN200 | 20                      | 858  | 460   | 1200 | 530   | 372   | 2" | 2" | 175   | 560   | 60  | 292    | 223    |
|       | 25                      | 858  | 460   | 1200 | 530   | 372   | 2" | 2" | 175   | 560   | 60  | 292    | 223    |
| DN250 | 20                      | 950  | 615   | 1580 | 600   | 530   | 2" | 2" | 175   | 688   | 72  | 440    | 376    |
|       | 25                      | 950  | 615   | 1580 | 600   | 530   | 2" | 2" | 175   | 688   | 72  | 440    | 376    |
| DN300 | 20                      | 1010 | 740   | 1700 | 600   | 540   | 2" | 2" | 200   | 698   | 72  | 564    | 415    |
|       | 25                      | 1010 | 740   | 1700 | 600   | 540   | 2" | 2" | 200   | 698   | 72  | 564    | 415    |
| DN350 | 20                      | 1100 | 754   | 1800 | 700   | 525   | 2" | 2" | 200   | 816   | 108 | 735    | 623    |
|       | 25                      | 1100 | 754   | 1800 | 700   | 525   | 2" | 2" | 200   | 816   | 108 | 735    | 623    |



### Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-IBR16-19IN) supplied with the product.

**Installation note:** To ensure efficient drainage of condensate a suitable ball float trap and air vent should be installed. For air/gas applications a balance line is required between the CA trap and the main line or top of the separator – consult Spirax Sarco for further details.

### Disposal

The product is recyclable. No ecological hazard is anticipated with disposal of this product providing due care is taken.

### Spare parts

The S7 is non maintainable - No spare parts are available.

### Capacities

See TI-S33-06 for full details of capacities.

### How to order

**Example:** 1 off Spirax Sarco DN80 S7 carbon steel separator with ASME 300 flanges. Suitable for pressures up to 25 bar (please specify design conditions).