

# spirax sarco

TI-P067-02  
 ST Issue 6

## 900 Series Steel Inverted Bucket Steam Traps

### Description

The Spirax Sarco 900 Series inverted bucket steam traps are designed for mounting in vertical pipework between flanges. With forged steel body and cover they are suitable for high pressure applications and incorporate an integral check valve on the inlet.

### Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC and carries the CE mark when so required.

### Certification

This product is available with certification to EN 10204 3.1.  
**Note:** All certification/inspection requirements must be stated at the time of order placement.

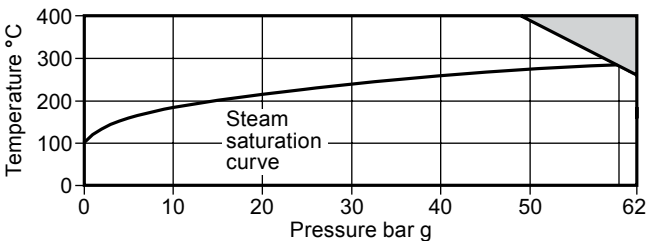
### Sizes and pipe connections

**DN15** - 921, **DN20** - 922, **DN25** - 923, **DN40** - 925 and **DN50** - 926  
 In all sizes the body and cover forgings form the inlet and outlet flanges.

The drilled holes in both inlet and outlet flanges are tapped to receive bolts. ASME flanges are tapped UNC. EN 1092 flanges are tapped metric.

Flanges meet the requirements of the following standards: ASME 600 and EN 1092 PN64 or PN40.

### Pressure/temperature limits



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

**Note:** Maximum operating conditions depend on the orifice size.

Body design conditions exceed PN63

PMO Maximum operating pressure 62 bar g @ 260°C

TMO Maximum operating temperature 400°C @ 49 bar g

Designed for a maximum cold hydraulic test pressure of 93 bar g

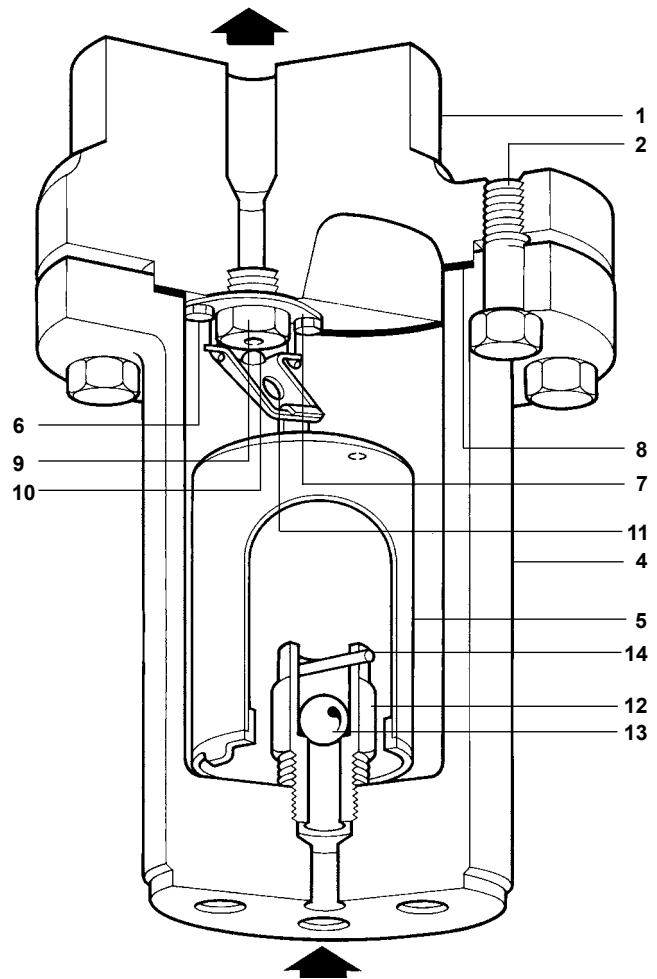
**Note:** ASME 600 flanges must be used only below the body design conditions:

### ΔPMX - Maximum differential pressure

Size	ΔPMX - Maximum differential pressure bar	
	48	62
DN15	-	921/8
DN20	-	922/8
DN25	923/12	923/10
DN40	925/12	925/10
DN50	926/18	926/16

**Note:** The pressure limit on the flange specified should be greater than the pressure limit of the internal mechanism. The table below offers guidance:

Flange	Pressure (at saturation)	Mechanism available
ASME 600	84 bar g	all versions
PN40	60 bar g	48 bar
PN64	64 bar g	48 bar

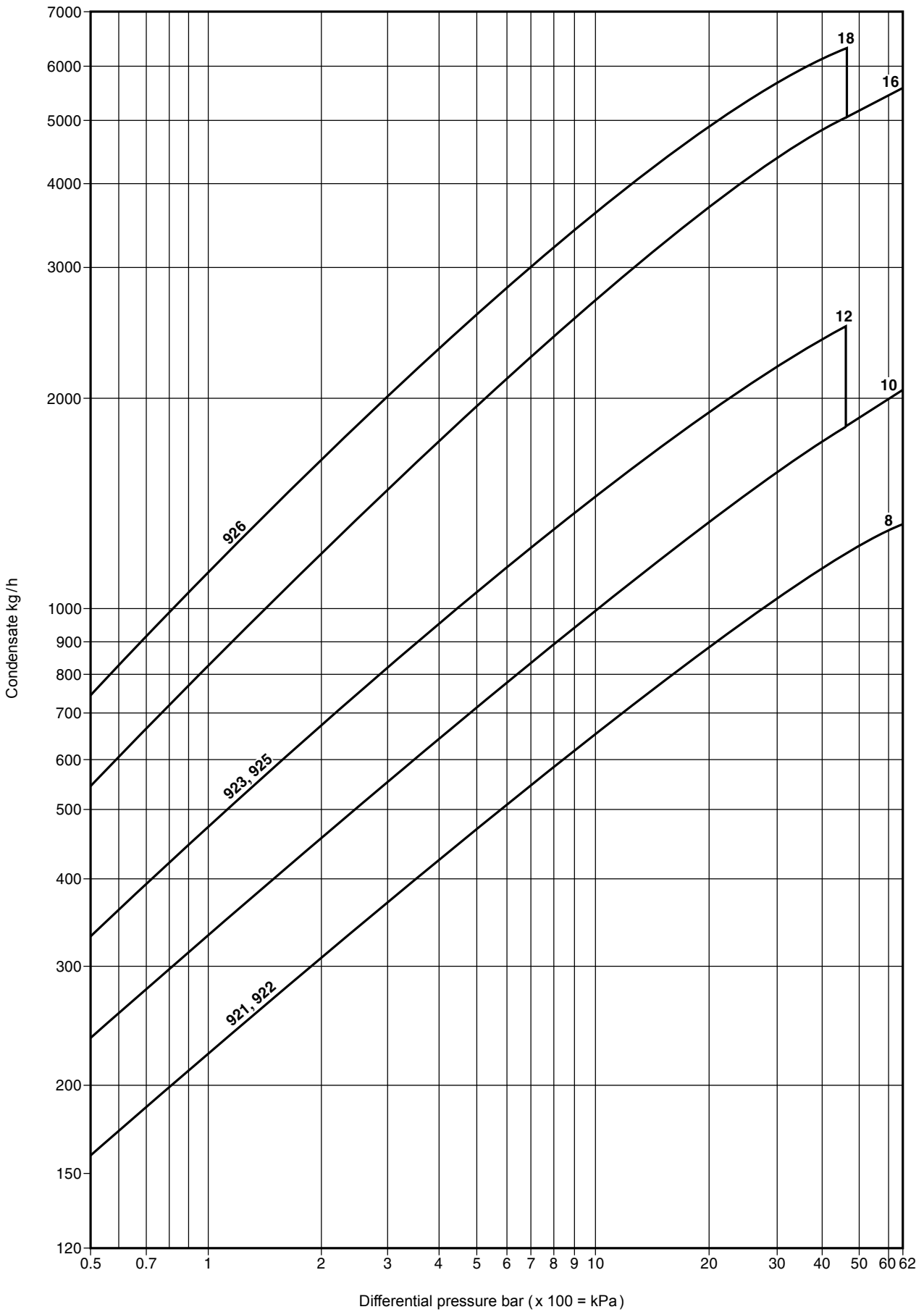


### Materials

No. Part	Material
1 Cover	Forged steel ASTM A182 F11/F22
2 Cover bolts	Steel ASTM A193 Gr. B7
4 Body	Forged steel ASTM A182 F11
5 Bucket	Stainless steel BS 1449 304 S16
6 Valve guide plate bolts	Stainless steel BS 4183 (18/8)
7 Valve guide plate	Stainless steel BS 1449 304 S11
8 Cover gasket	Nickel reinforced exfoliated graphite
9 Valve seat	Stainless steel AISI 440B
10 Valve	Stainless steel AISI 440B
11 Valve lever	Stainless steel BS 1449 321 S31
12 Internal tube and C.V seat	Stainless steel 1.4034
13 Ball valve	Stainless steel AISI 440B
14 Retainer pin	Stainless steel BS 1449 304

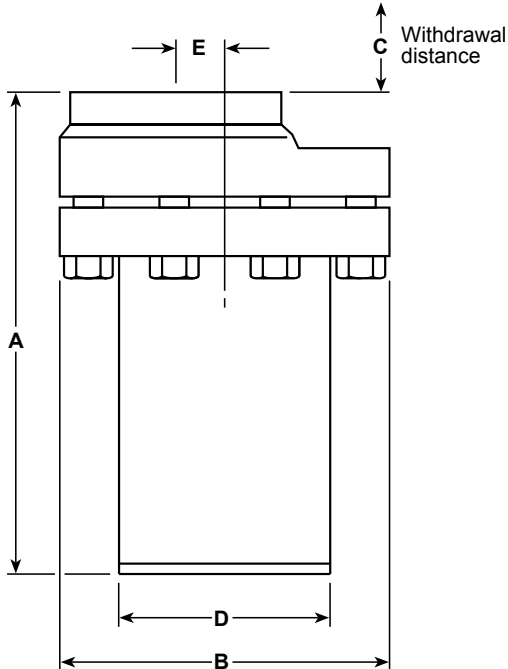
### Capacities

**Note:** Traps should be selected for the most appropriate working pressure differential and not on the basis of load.



**Dimensions / weights (approximate) in mm and kg**

Size	A	B	C	D	E	Weight
DN15	310	203	229	130	36	29.5
DN20	310	203	229	130	36	29.5
DN25	410	248	305	168	45	50.0
DN40	410	248	305	168	45	50.0
DN50	452	301	330	213	52	79.4



**Spare parts**

The spare parts available are shown in heavy outline. Parts drawn in broken line are not supplied as spares.

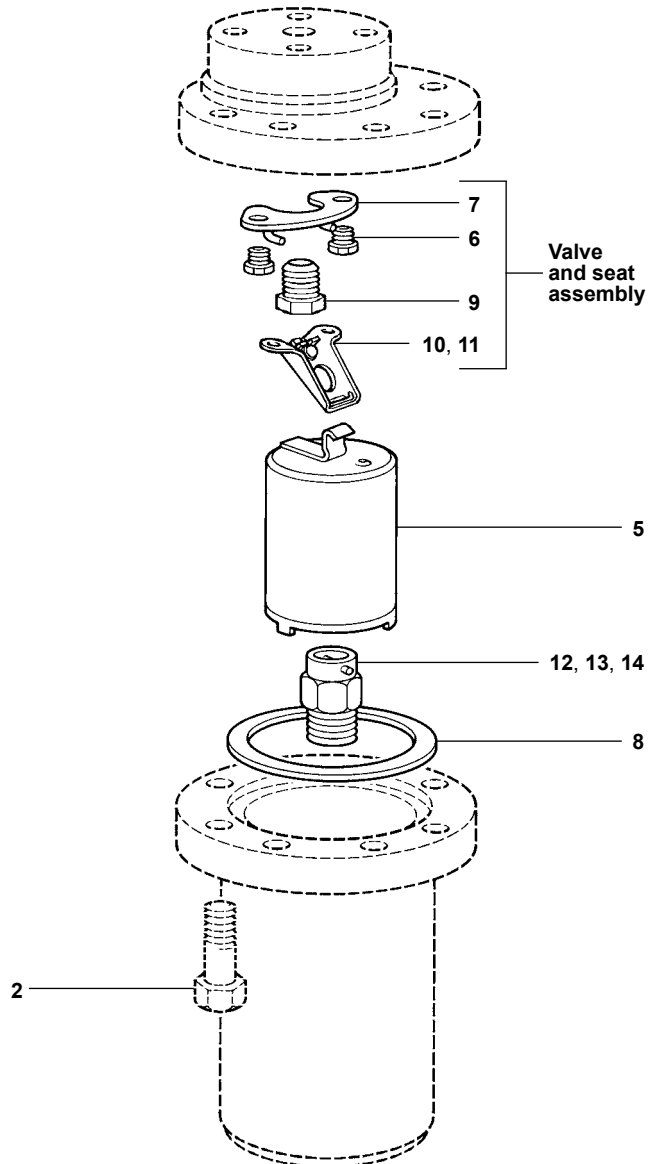
**Available spares**

Valve and seat assembly (state pressure range)	6 (2 off), 7, 9, 10, 11
Bucket assembly	5
Check valve assembly	12, 13, 14
Cover gasket (packet of 3)	8

**How to order spares**

Always order spares by using the description given in the column headed 'Available spares' and state the size and full definition of the trap e.g. 922/8.

**Example:** 1 - Valve and seat assembly for a DN20 Spirax Sarco inverted bucket steam trap, series 922/8.



**Safety information, installation and maintenance**

For full details see the Installation and Maintenance Instructions (IM-P067-06) supplied with the product.

**Installation note:**

The trap must be installed with the body upright so that the bucket is rising and falling vertically. The inlet should be at the bottom with the trap installed below the drain point so that a water seal can be maintained around the open end of the bucket.



**Disposal**

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

**How to order**

**Example:** 1 off Spirax Sarco DN15, 921/8 inverted bucket steam trap with steel body having flanged ASME 600 connections.

**Recommended tightening torques**

Item	 or 	mm	N m
2 (921 - 925) (926)		M20 x 2.5P x 65 M22 x 2.5P x 70	120 - 135 150 - 165
6 (921 - 925) (926)	10 A/F 13 A/F	1/4" whit. x 1/2" 5/16" whit. x 1/2"	15 - 20 20 - 25
(921 - 922) 9 (923, 925) (926)	7/8" A/F 1 1/4" A/F 1 1/2" A/F	7/8" whit. x 1/2" 1 1/4" x 14 UNF 1 1/2" x 12 UNF	80 - 88 180 - 200 270 - 300
12 (921 - 923) (925 - 926)	1 1/8" A/F 2" A/F		200 - 220 300 - 320