



Cert. No. LRQ 0963008

ISO 9001

spirax sarco

TI-S03-03 / 40200xA-1 1/3
ST Issue 2

200 Series Cast Iron Inverted Bucket Steam Traps



CHRYSSAFIDIS

Description

The Spirax Sarco 200 Series of inverted bucket steam traps are designed for installation in vertical pipework. With cast iron bodies and bolted cover they are maintainable and offer a very wide range of capacities, in applications up to 17 bar g.

Sizes and pipe connections

1/2" - 2" screwed BSP or NPT
DN15 - 50 flanged*

*Flanges meet the requirements of BS 4504 DIN PN16, PN10, PN6 and ANSI 125 and ANSI 150.

In some sizes the inlet and outlet flanges are formed from the body casting and have tapped holes to receive studs.

The stud holes are tapped UNC in ANSI flanges and metric in BS 4504 DIN flanges.

Limiting conditions

Note: Maximum operating conditions depend on the orifice size.

Body design conditions PN16

PMO - Maximum operating pressure 22 bar g @ 210°C

TMO - Maximum operating temperature 210°C @ 22 bar g

Designed for a maximum cold hydraulic test pressure of 34 bar g

Δ PMX - Maximum differential pressure

Screwed valves

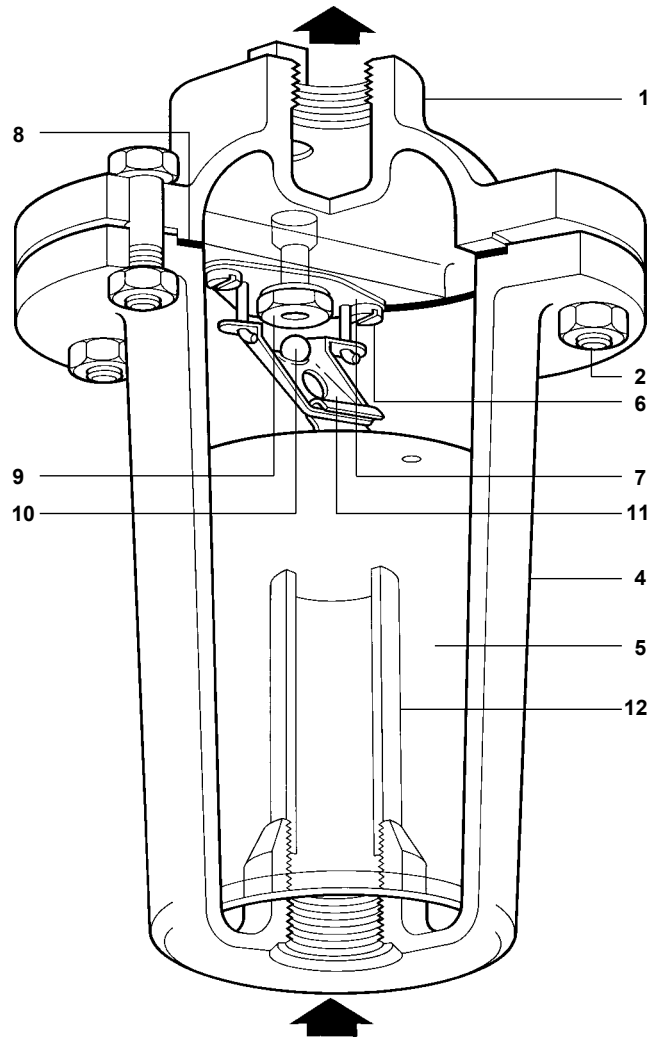
Size	Δ PMX - Maximum differential pressure bar						
	2	2.5	4	8.5	12.5	13.8	17
1/2"	211/12	-	211/10	211/8	-	211/7	211/6
3/4"	212/16	-	212/12	212/10	-	212/8	212/7
1"	213/24	-	213/20	213/16	213/14	-	213/12
1 1/2"	215/36	-	215/28	215/22	215/20	-	215/18
2"	-	216/48	216/40	216/32	216/28	-	216/24

Flanged valves

Size	Δ PMX - Maximum differential pressure bar						
	2	2.5	4	8.5	12.5	13.8	17
DN15	221/12	-	221/10	221/8	-	221/7	221/6
DN20	222/16	-	222/12	222/10	-	222/8	222/7
DN25	223/24	-	223/20	223/16	223/14	-	223/12
DN40	225/36	-	225/28	225/22	225/20	-	225/18
DN50	-	226/48	226/40	226/32	226/28	-	226/24

Materials

No.	Part	Material
1	Cover	Cast iron DIN 1691 GG 20
2	Cover bolts	Steel BS 3692 Gr. 8.8
	Cover nuts	Steel BS 3692 Gr. 8
4	Body	Cast iron DIN 1691 GG 20
5	Bucket	Stainless steel BS 1449 321 S31
6	Valve guide plate screws	Stainless steel BS 4183 (18/8)
7	Valve guide plate	Stainless steel BS 1449 321 S31
8	Cover gasket	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	Steel BS 1387 (MED)



Screwed version shown
(for details of the flanged version see overleaf)

Certification

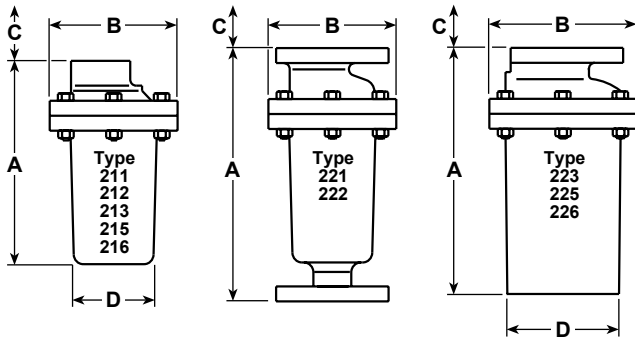
This product is available with certification to EN 10204 2.2. **Note:** All certification/inspection requirements must be stated at the time of order placement.

Capacities

For capacities see Technical Information Sheet TI-S03-04.

Dimensions/weight (approximate) in mm and kg Screwed

Type	Size	A	B	C	D	Weight
Type 211	1/2"	163	108	178	67	2.8
Type 212	3/4"	200	135	229	93	5.2
Type 213	1"	269	188	280	114	12.2
Type 215	1 1/2"	365	238	380	140	27.0
Type 216	2"	432	286	470	185	43.5



Flanged

Type	Size	A	B	C	D	Weight
Type 221	DN15	215	108	254	-	4.9
Type 222	DN20	286	135	280	-	9.1
Type 223	DN25	305	188	305	121	16.3
Type 225	DN40	370	238	380	140	30.8
Type 226	DN50	450	286	457	165	49.4

Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-S03-08) supplied with the product.

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 end of the bucket.

Disposal

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

How to order

Example: 1 off DN40 225/18 Spirax Sarco inverted bucket steam trap with flanged PN16 connections.



Spare parts

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

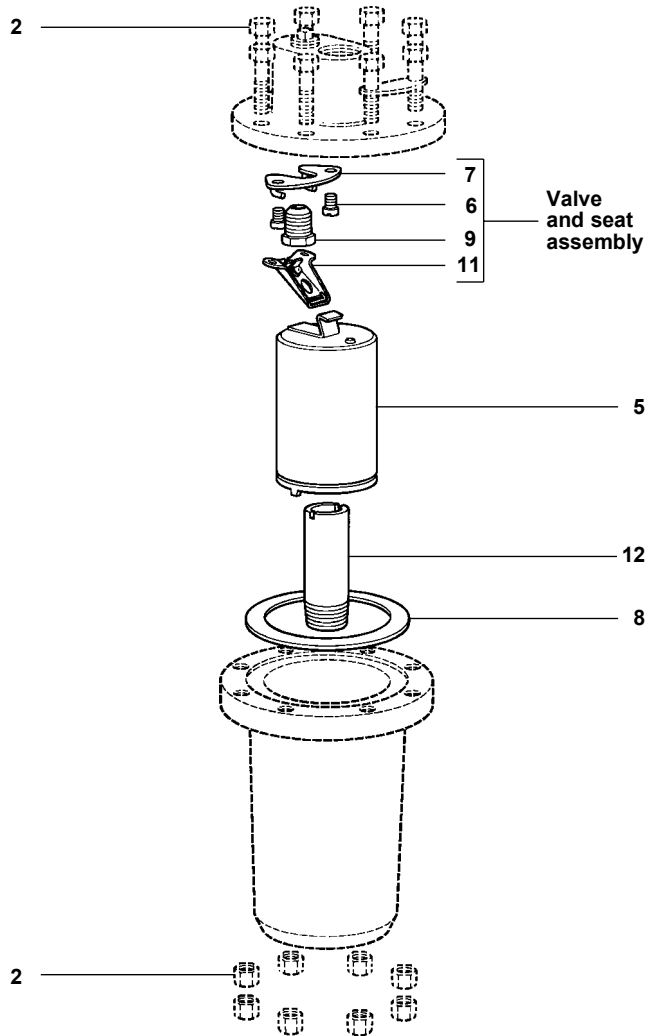
Available spares

Valve and seat assembly (state pressure range)	6 (2 off), 7, 9, 11
Bucket	5
Internal tube	12
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. 212/10.

Example: 1 - Valve and seat assembly for a 3/4" Spirax Sarco inverted bucket steam trap Series 212/10.



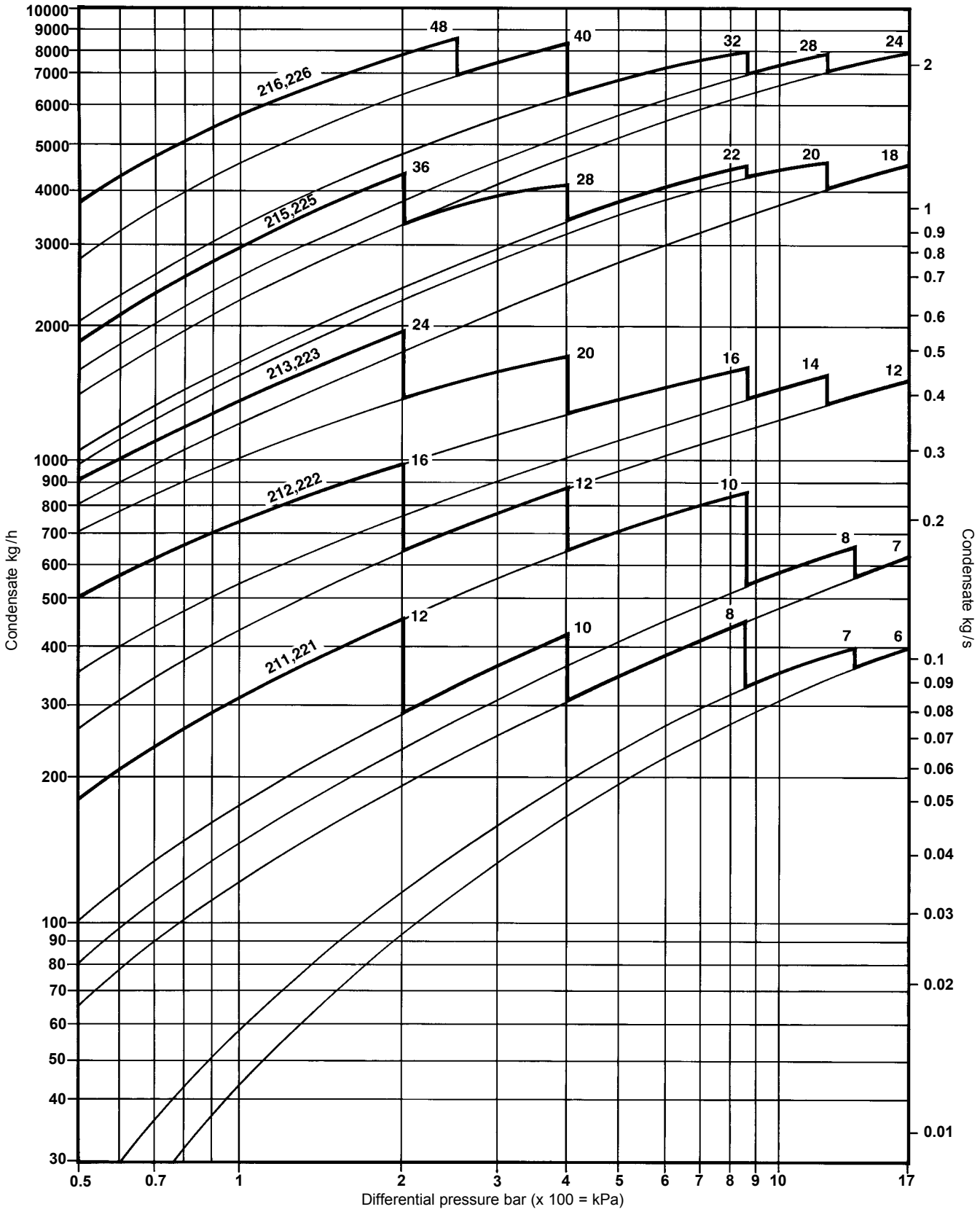
Recommended tightening torques

Item	Size of trap	 or  mm	N m
2 (6 off)	1/2" - DN15	M8 x 35	18 - 22
2 (8 off)	3/4" - DN20	M10 x 40	16 - 20
2 (10 off)	1" - DN25	M12 x 60	24 - 28
2 (12 off)	1 1/2" - DN40	M16 x 75	60 - 66
2 (12 off)	2" - DN50	M16 x 75	64 - 70
6	1/2" - DN15	2BA x 5/16"	4 - 5
	3/4" - DN20	2BA x 5/16"	4 - 5
	1" - DN25	1/4" WHIT x 1/2"	10 - 12
	1 1/2" - DN40	1/4" WHIT x 1/2"	10 - 12
	2" - DN50	5/16" WHIT x 1/2"	14 - 16
9	1/2" - DN15	1/2"AF	23 - 27
	3/4" - DN20	5/8"AF	40 - 44
	1" - DN25	7/8"AF	80 - 88
	1 1/2" - DN40	1 1/4"AF	175 - 190
	2" - DN50	1 1/2"AF	270 - 300
12	1/2" - 2" DN15 - DN50	1 1/2"AF	60 - 70



Capacities for the 200 Series

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

For further technical details see TI-S03-03