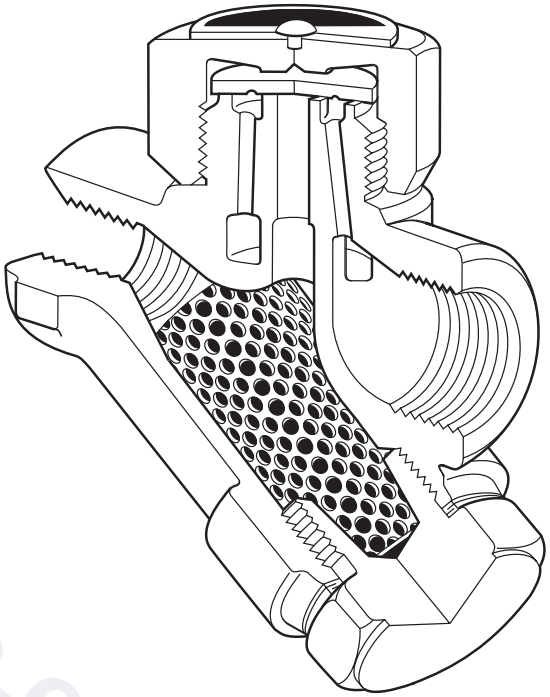
Local regulations may restrict the use of this product to below the conditions quoted.
In the interests of development and improvement of the product, we reserve the right to change the specification without notice. © Copyright 2023

Airodyn
Compressed Air Drain Trap



Description
The **Airodyn** is a thermodynamic type compressed air drain trap. The external body surfaces are electroless nickel plated (ENP) which is oxidation resistant.

Operating media
The Airodyn is designed for use on air or gases within PED group 2.

Note: The Airodyn is not suitable for use on PED group 1 liquids or gases.

Optionally

Airodyn S	The Airodyn S has been designed for ultra clean applications. This trap has a fine lap disc (item 3).
Airodyn HD	The Airodyn HD has been designed for particularly oil contaminated air systems.

Standards
This product fully complies with the requirements of the EU Pressure Equipment Directive/UK Pressure Equipment (Safety) Regulations.

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

Airodyn	½" screwed BSP or NPT ¾" screwed BSP or NPT	**Airodyn HD**	½" screwed BSP

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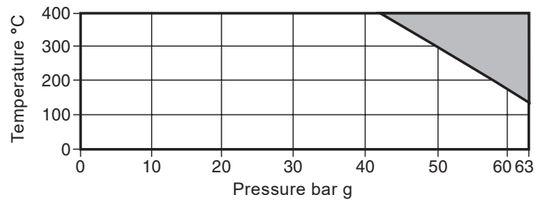
Pressure/temperature limits



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

Body design conditions		PN63
PMA	Maximum allowable pressure	63 bar g @ 120°C
TMA	Maximum allowable temperature	400°C @ 42 bar g
Minimum allowable temperature		0°C
PMO	Maximum operating pressure for saturated steam service	63 bar g @ 120°C
TMO	Maximum operating temperature	400°C @ 42 bar g
Minimum operating temperature		0°C
PMOB	Maximum backpressure should not exceed 80% of the inlet pressure under any conditions of operation otherwise the trap may not shut-off.	
Minimum operating differential pressure for satisfactory operation		0.25 bar
Designed for a maximum cold hydraulic test pressure of:		95 bar g

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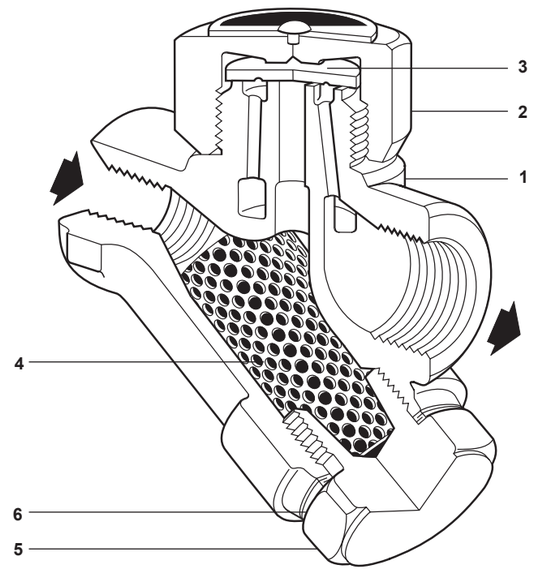
Materials



No.	Part	Material	
1	Body	Stainless steel	ASTM A743 Gr. CA40F
2	Cap	Stainless steel	AISI 416
3	Disc	Stainless steel	BS 1449 420 S45
4	Strainer screen	Stainless steel	BS 1449 304 S16
5	Strainer cap	Stainless steel	AISI 416
6	Strainer cap gasket	Stainless steel	BS 1449 304 S16

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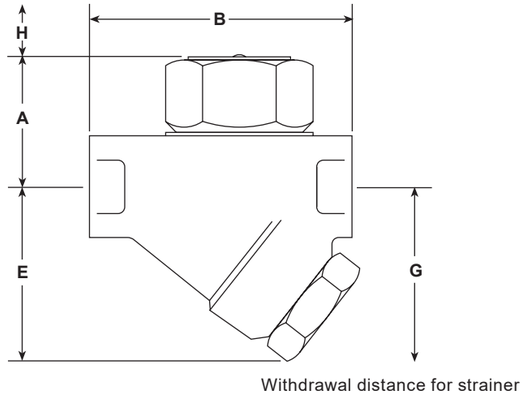
Dimensions/weights (approximate) in mm and kg

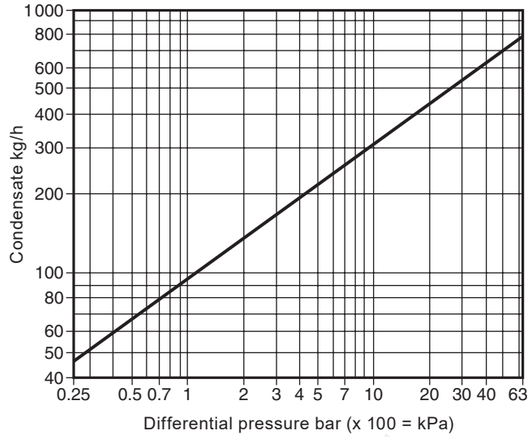
Size	A	B	E	G	H	Weight
½"	41	78	55	85	20	0.77
¾"	44	85	60	100	20	0.95

Withdrawal distance for cap



Withdrawal distance for strainer

Capacities



K_v values

Size	½"	¾"
K_v	3.09	3.09

For conversion:
C_v (UK) = K_v x 0.963
C_v (US) = K_v x 1.156

Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-S48-06) supplied with the product.

Installation note:

Preferably fitted in a horizontal pipe but can be fitted in vertically downwards pipe.

Operation

One side of the disc (**3**) is plain with a single scribe towards the outer edge, whereas the other side of the disc has a machined circular groove. The Airodyn is supplied with the circular grooved side of the disc towards the seating face and is suitable for clean operating conditions with the exception of the 'HD' version which has been designed for particularly contaminated air system having the scribed disc facing the seat. If the operation conditions are dirty, probably with heavy oil contamination, unscrew the cap, using preferably a ring spanner and turn over the disc so that the plain side with a bleed scribe is towards the seating face. Replace cap - no gasket is required but a suitable high temperature anti-sieze grease should be applied to the threads.

Tighten the cap to the recommended torque. Do not use a wrench of the Stillson type which may distort the cap.
In extremely dirty conditions it may be necessary to deepen the bleed scribe or to make additional scribes up to a maximum of 3 thus.
The scribe should be over the area covered by and extending beyond the outer seat face.

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 Spirax Sarco ½" screwed BSP Airodyn compressed air drain trap.

Spare parts

The spare parts available are shown in solid outline.
Parts drawn in a grey line are not supplied as spares.

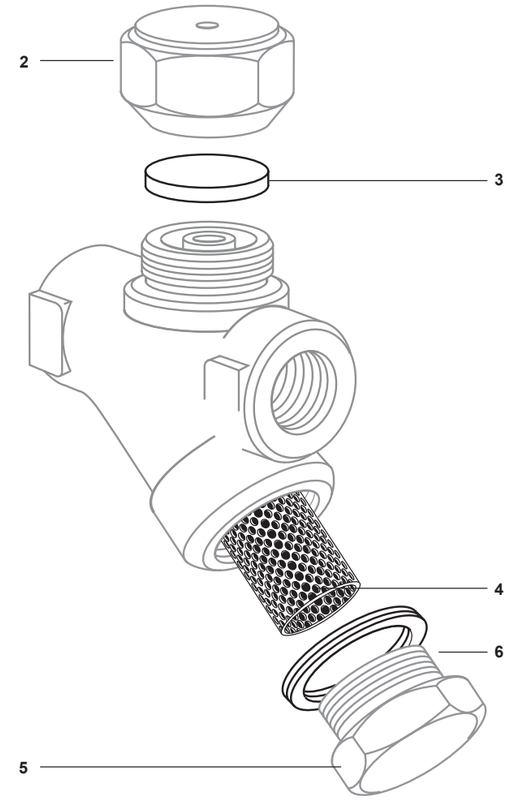
Available spares

Disc (packet of 3)	**3**
Strainer screen and gasket	**4**, **6**
Strainer cap gasket (packet of 3)	**6**

How to order spares

Always order spares by using the desciption given in the column headed 'Available spares' and state the size and type of trap.

Example: 1 - Strainer screen for a Spirax Sarco ½" Airodyn compressed air drain trap.



Recommended tightening torques

Item	Part	or mm		N m
2	Cap	36 A/G		150
5	Strainer cap	32 A/F	M28	170 -190

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