



Cert. No. LRQ 0963008

ISO 9001

BRAir Compressed Air Drain Trap

Description

The BRAir is a thermodynamic type compressed air drain trap, specifically for use on railway rolling stock (British Rail Cat. no. 61/41955). The external body surfaces have electroless nickel preparation (ENP) which is oxidation resistant.

Sizes and pipe connections

1/2" screwed BSP or NPT.

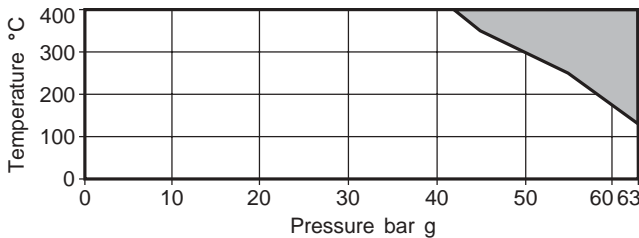
Limiting conditions

Body design conditions	PN63
PMA Maximum allowable pressure	63 bar g
TMA Maximum allowable temperature	400°C
PMO Maximum operating pressure	63 bar g
TMO Maximum operating temperature	400°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

Operating range



This product must not be used in this region.

Material

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

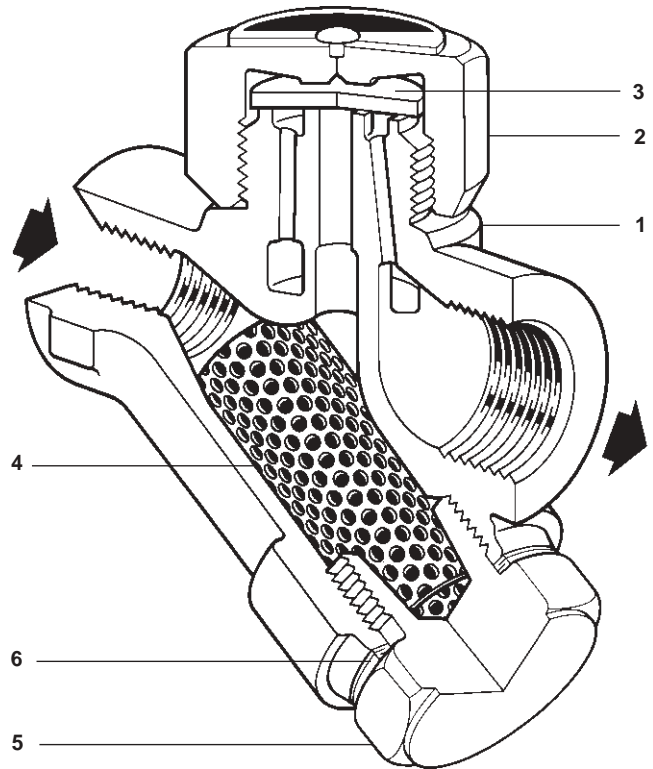
Certification

The product is available with certification to EN 10204 2.2 for body and cap as standard and EN 10204 3.1.B if specified at the time of ordering.

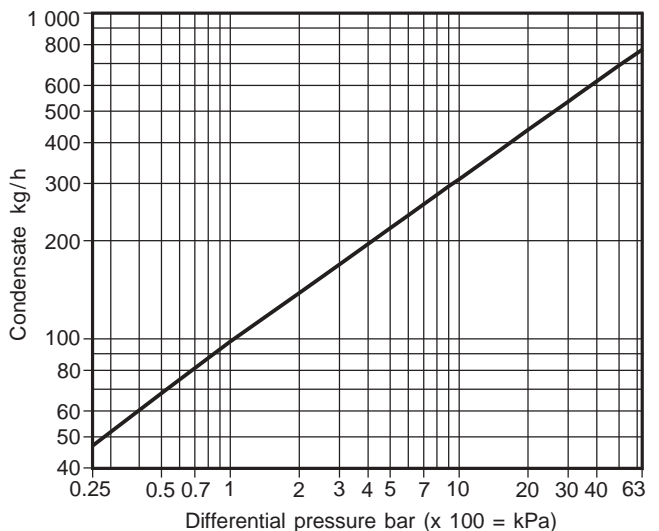
Kv values

Size	1/2"
Kv	3.09

For conversion: $C_v (UK) = K_v \times 0.963$ $C_v (US) = K_v \times 1.156$



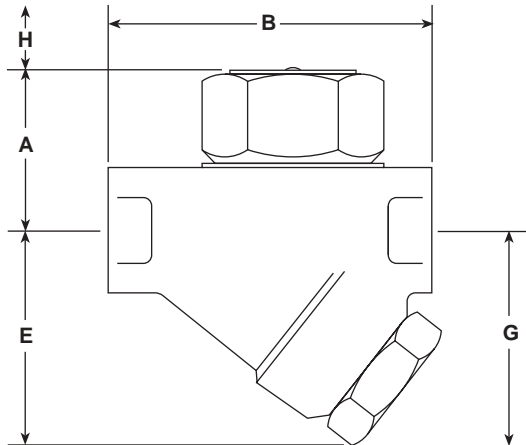
Capacities



Dimensions/weight (approximate) in mm and kg

Size	A	B	E	G	H	Weight
½"	41	78	55	85	41	0.77

Withdrawal distance for cap



Withdrawal distance for strainer

Safety information

Pressure

Before attempting any maintenance of the trap, consider what is or may have been in the pipeline. Ensure that any pressure is isolated upstream and downstream of the trap and safely vented to atmospheric pressure before attempting to maintain the trap. This is easily achieved by fitting Spirax Sarco depressurisation valves type DV (see separate literature for details). Do not assume that the system is depressurised even when a pressure gauge indicates zero.

Temperature

Allow time for temperature to normalise after isolation to avoid the danger of burns and consider whether protective clothing (including safety glasses) is required.

Installation

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

Maintenance

How to service

Unscrew cap using a spanner. Do not use Stillsons or a wrench of a similar type which may cause distortion to the cap. If the body seating faces are only slightly worn they can be refaced by lapping individually on a flat surface such as a surface plate. A figure of eight motion and a little grinding compound such as a Carborundum Co's compound I.F. gives the best results.

If the wear is too great to be rectified by simple lapping, the seating faces on the body must be ground flat and then lapped. **Note: The disc should always be replaced with a new one.** The total amount of metal removed in this way should not exceed 0.25 mm. When reassembling, the disc is normally placed in position with the grooved side in contact with the body seating face. Screw on the cap. No gasket is required but a suitable high temperature anti-seize grease should be applied to the threads.

To clean or replace the strainer

Unscrew strainer cap using spanner, withdraw screen and clean, or if damaged replace with new one.

To reassemble, insert screen into cap, then screw cap into place. A fine smear of 'Molybdenum Disulphide' grease should be applied to the first few threads. Care should be taken to ensure that the gasket and gasket faces are clean. Tighten cap to the recommended torque.

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" BRair compressed air drain trap screwed BSP.

Spare parts

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

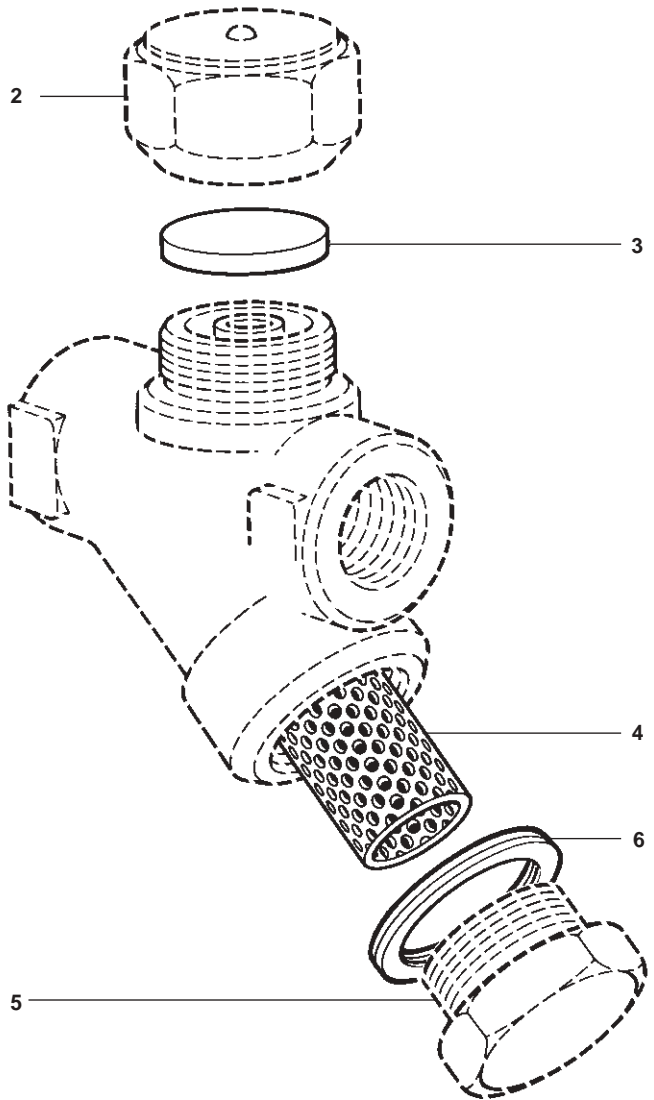
Available spares

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 description given in the column headed 'Available spares' and state the size and type of trap.

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



Recommended tightening torques

Item	or mm	N m
2	36	150
5	32 M28	170 - 190