

Sight Check (Combined Sight Glass and Check Valve)

Description

A sight check is a combined sight glass and check valve. It is used to observe discharges from steam traps. The position of the ball check indicates whether or not condensate is flowing. Where condensate rises after the trap it eliminates the need for a separate check valve thus simplifying installation.

The sight check is particularly useful for commissioning a steam trap fitted with an adjustable needle valve/steam lock release (SLR).

It can also be used on other liquid lines where the materials of construction are compatible.

Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC.

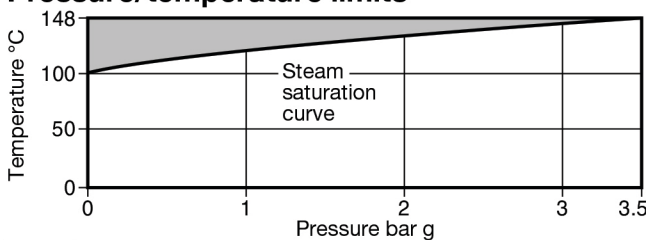
Certification

This product is available with a manufacturers' Typical Test Report.
Note: All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipe connections

½", ¾" and 1" screwed BSP or NPT.

Pressure/temperature limits



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

Body design conditions	PN3.6
PMA Maximum allowable pressure	3.5 bar g @ 148°C
TMA Maximum allowable temperature	148°C @ 3.5 bar g
Minimum allowable temperature	-10°C
PMO Maximum operating pressure	3.5 bar g @ 148°C
TMO Maximum operating temperature	148°C @ 3.5 bar g
Minimum operating temperature	0°C
Note: For lower operating temperatures consult Spirax Sarco	
Designed for a maximum cold hydraulic test pressure of 7 bar g	
PTMX Maximum test pressure (steam service)	3.5 bar g

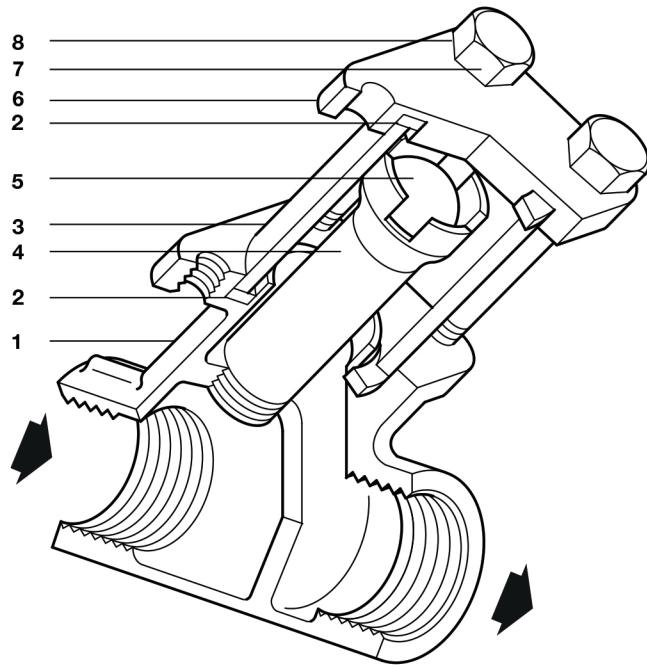
K_v values

Size	½"	¾"	1"
K _v	2.6	2.81	4.59

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

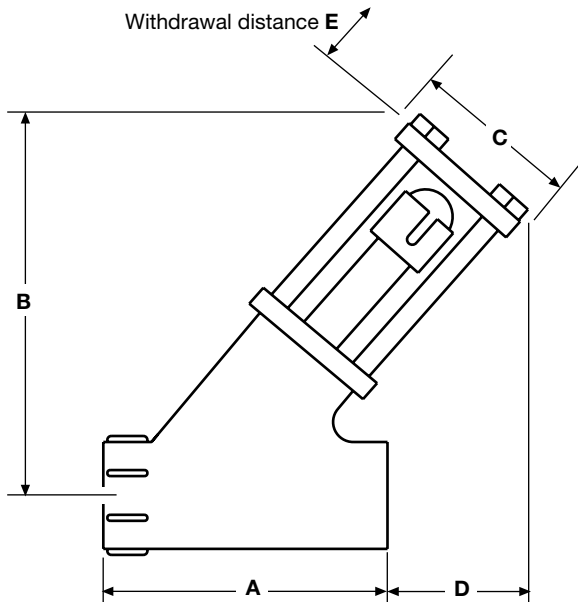
Materials

No.	Part	Material
1	Body	Bronze EN 1982 CC491K
2	Gasket	Glass reinforced graphite laminate
3	Sight tube	Borosilicate glass
4	Discharge tube	Copper BS 2871 PT2 C106
5	Ball check	Stainless steel BS 970 420 S45
6	Cover	Brass EN 12165 CW617N
7	Cover bolts	Steel zinc plated BS 3692 Gr. 8.8
8	Shakeproof washers	Steel zinc plated



Dimensions/weights (approximate) in mm and kg

Size	A	B	C	D	E	Weight
1/2"	76	95	44	38	64	0.6
3/4"	76	95	44	38	64	0.6
1"	89	108	54	38	64	1.2



Spare parts

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

Available spares

Sight tube assembly	2 (2 off), 3 (1 off)
Discharge tube assembly	4, 5
Fastener set (set of 4*)	7, 8
Gasket set (packet of 6†)	2

Available spares are common to 1/2" and 3/4" sizes, but not 1".

* Earlier models used studs, nuts and washers.



† Earlier models used ethylene propylene gaskets which were considerably thicker than graphite laminate.

How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state the size of the sight check.

Example: 1 off sight tube assembly for a 1/2" Spirax Sarco sight check.

Recommended tightening torque

Item	Size	 mm or 	N m
7	1/2", 3/4" and 1"	10 A/F	1.8 - 2.2
4		M6 x 65	5.0 - 6.0

Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-S32-04) supplied with the product.

Warning:

Under certain conditions corrosive elements in condensate can affect the inside face of the sight tube, particularly where caustic alkali and hydrofluoric acid are present. It is recommended that the sight check is periodically checked for thinning of the sight tube. If there is evidence of thinning or erosion damage then the sight tube should be replaced immediately. Always wear eye protection when viewing the contents of the sight check.

Installation and maintenance note:

The sight check should have stop valves fitted on both the inlet and outlet. It is imperative that the upstream stop valve is closed first in order to prevent over pressurisation.

Sight checks can be fitted in either a horizontal or a vertical line on the outlet side of the steam trap. Where the trap is a blast discharge type e.g. thermodynamic, the sight check must be fitted at least 1 m from the trap. This is to ensure that the glass tube is not subjected to thermal shock or pressure. Reasonable steps should be taken to protect personnel from injury in the unlikely event that the glass breaks.

Ensure access is available to enable the withdrawal of the discharge tube.

Disposal

This 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 1/2" BSP sight check having a bronze body and borosilicate glass tube.

