Burst Indicators
Leakage Sensors

- Product Overview
- Application

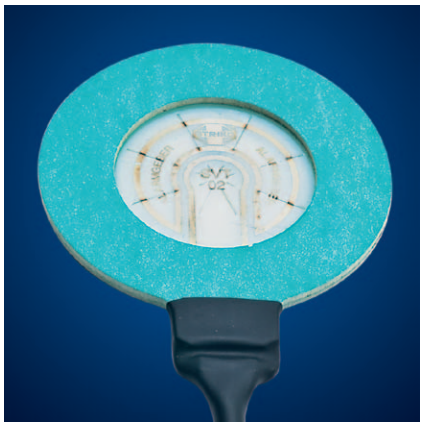
STRIKO®

Verfahrenstechnik

Product Overview

Burst Indicator **SVT 02**

The Standard-Indicator



Burst Indicators are simple and effective tools to capture response of a Bursting Disk or a Safety Valve. Combined with a Bursting Disk they're installed on the discharge side between the Bursting Disk Holder and flange, or on the outlet flange of the Safety Valve in place of the typical gasket.

The inexpensive Standard-Indicator SVT 02 is advisable for all applications in temperatures between -30°C and +220°C in non-aggressive environments. It is delivered ready to install complete with gaskets (Klingersil C4400, graphite, PTFE, etc.) suitable for DIN, ANSI and JIS flanges and with Teflon-coated connecting cable.

On the SVT 02 the PEEK membrane features slots to compensate for the thermal expansion volume between the Bursting Disk and Indicator, or the valve seat and the outlet flange respectively. This eliminates a false alarm being generated due to damage to the vapour deposited silver pathway, yielding a high life.

Available nominal widths and minimum response pressures of Bursting Disk or Safety Valve:

Nominal width	25	40	50	80	100	150	200	250	300	350	400	450	500	600
Thickness in mm	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Pressure in bar(g)	0,3	0,3	0,3	0,2	0,1	0,07	0,07	0,07	0,07	0,07	0,07	0,07	0,07	0,07

Burst Indicator **SVT 05**

The Leakage Sensor

The SVT 05 leakage sensor is the practical advanced version and essential addition to the reliable STRIKO SVT 02. With an added sealed PTFE film on the product side it's reliable in detecting even the smallest leaks. The PTFE film bulges even if the pressure increasing very slowly, destroying the conducting circuit on the scored PEEK membrane. Yet the response pressure is only slightly higher than on the SVT 02, with operating temperatures also between -30°C and +220°C.

Conventional Burst Indicators only send a signal when the Bursting Disk is fully opened. Their design featuring a scored film makes them suitable for low pressures, however only if the pressure rises relatively quickly. A slow rise in pressure, e.g. due to faulty Safety Valves or pitting / hairline fractures in the Bursting Disk, can be compensated by the scored film of the standard SVT 02 alarm and does not trigger a signal.

The early recognition of leaking Bursting Disks or leaking Safety valves is especially important from an environmental perspective, offered by the SVT 05. It comes ready to install, complete with gaskets and connecting cable.

Available nominal widths and minimum response pressures of Bursting Disk or Safety Valve:

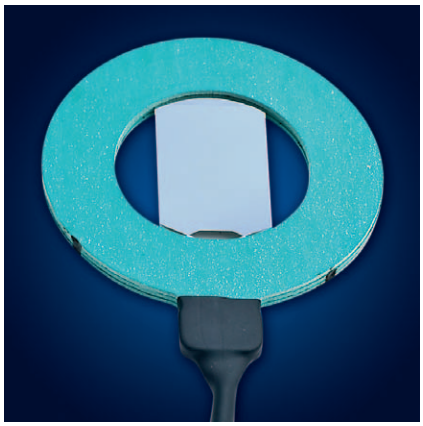
Nominal width DN	25	40	50	80	100	150	200	250	300	350	400
Thickness in mm	5	5	5	5	5	5	5	5	5	5	5
Pressure in bar(g)	0,8	0,5	0,3	0,2	0,15	0,15	0,15	0,15	0,15	0,15	0,15

Burst Indicator **SVT AM**

The full metal Burst Indicator

The full metal Burst Indicator SVT AM is used for high temperatures and aggressive mediums. The metal membrane is made from high-quality metals such as stainless steel 1.4310, Hastelloy C276, tantalum, silver and other materials – depending on the application requirements. This allows for high chemical resistance and operating temperatures from -30°C up to +370°C.

If necessary, gaskets such as Klingersil C4400, PTFE or Garlock Gylon Blau are combined with the appropriate metal membrane material depending on the requirement and assembled with a Teflon-coated cable or high-temperature cable – making the SVT AM adequate for any application.



Available nominal widths and minimum response pressures of Bursting Disk or Safety Valve:

Nominal width	25	40	50	80	100	150	200	250	300	350	400	450	500	600
Thickness in mm	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Pressure in bar(g)	0,3	0,3	0,3	0,2	0,1	0,07	0,07	0,07	0,07	0,07	0,07	0,07	0,07	0,07

Burst Indicator **SVT AM-L**

The low-pressure Burst Indicator

The SVT AM-L is used for applications with very low response pressures. It's reliable in signalling a Bursting Disk or Safety Valve opening with even the slightest of differential pressures.

The SVT AM-L is typically used for monitoring and securing large nominal size storage tanks and vacuum reactors. To prevent the Burst Indicator negatively impacting the bursting pressure of the upstream Bursting Disk it already responds at a differential pressure of 10mbar.

The wide selection of gasket materials and the use of a PFTE-membrane combined with the stainless steel conductor segment allows the SVT AM-L to also be used at temperatures from -30°C up to +220°C. As all STRIKO Burst Indicators, it can be retrofitted inside a flange connection in place of the gasket, even combined with Safety Valves and Bursting Disks of other manufacturers.

Available nominal widths and minimum response pressures of Bursting Disk or Safety Valve:

Nominal width DN	80	100	150	200	250	300
Thickness in mm	6	6	6	6	6	6
Pressure in mbar(g)	10	10	10	10	10	10

Technical Data

operating temperatures:	-30°C up to + 220°C (SVT AM up to + 370°C)
max. intensity of current:	50 mA
max. resistance before opening:	20 Ohm
supply voltage	any, note max. amperage (50 mA)

Note about ATEX

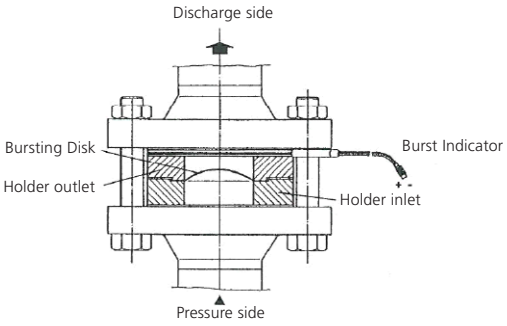
Per notice 3.42-10333/98-El of the Physikalisch-Technische Bundesanstalt dated 7/01/1998, in terms of Ignition Protection Intrinsic Safety "I" the Burst Indicator is a so-called simple electric device and is described in detail in Section 5.4 of EN 50020. When compliant with the requirements of EN 50020 and Section 6.1.3.1.3 of DIN VDE 0165/1991-02 „Installation of electric plants in potentially explosive environments" simple electric devices do not require certification. All STRIKO Burst Indicators and Leakage Sensors meet these requirements.

Function

Activating the Burst Indicator will interrupt the closed circuit, thus the working current signal, which e.g. triggers an audible or visual alarm in the control room or initiates other MSR measures. After the Bursting Disk or the Safety Valve has opened, the Burst Indicator is replaced along with the Bursting Disk, and the system is once again operational.

Installation

STRIKO Burst Indicators and Leakage Sensors are installed on the discharge side of the Bursting Disk, between the holder outlet side and the flange. They can also be used to monitor Safety Valves on their outlet side. As stand-alone components they can also be combined with Bursting Disks of other manufacturers.



Advantages

Advantages of using STRIKO Burst Indicators:

- compatible with metal and graphite Bursting Disks of all manufacturers
- suitable for use with flat Bursting Disks mounted directly between flanges without holder
- low height (5-6 mm) allow for retrofitting
- Burst Indicators are stand-alone components, thus separate / independent from Bursting Disk / Safety Valve
- easy to install and maintenance-free
- fast fault detection
- available in nominal widths DN 25 up to DN 600
- suitable for high temperature and aggressive environments
- ready-to-install complete with gaskets and connecting cables, also from stock

STRIKO®
Verfahrenstechnik

STRIKO Verfahrenstechnik
W. Strikfeldt & Koch GmbH
Fritz-Kotz-Str. 14
D-51674 Wiehl-Bomig

Phone: +49 (0) 2261 9855-0
Fax: +49 (0) 2261 7 24 88
E-Mail: info@striko.de
Internet: www.striko.de

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