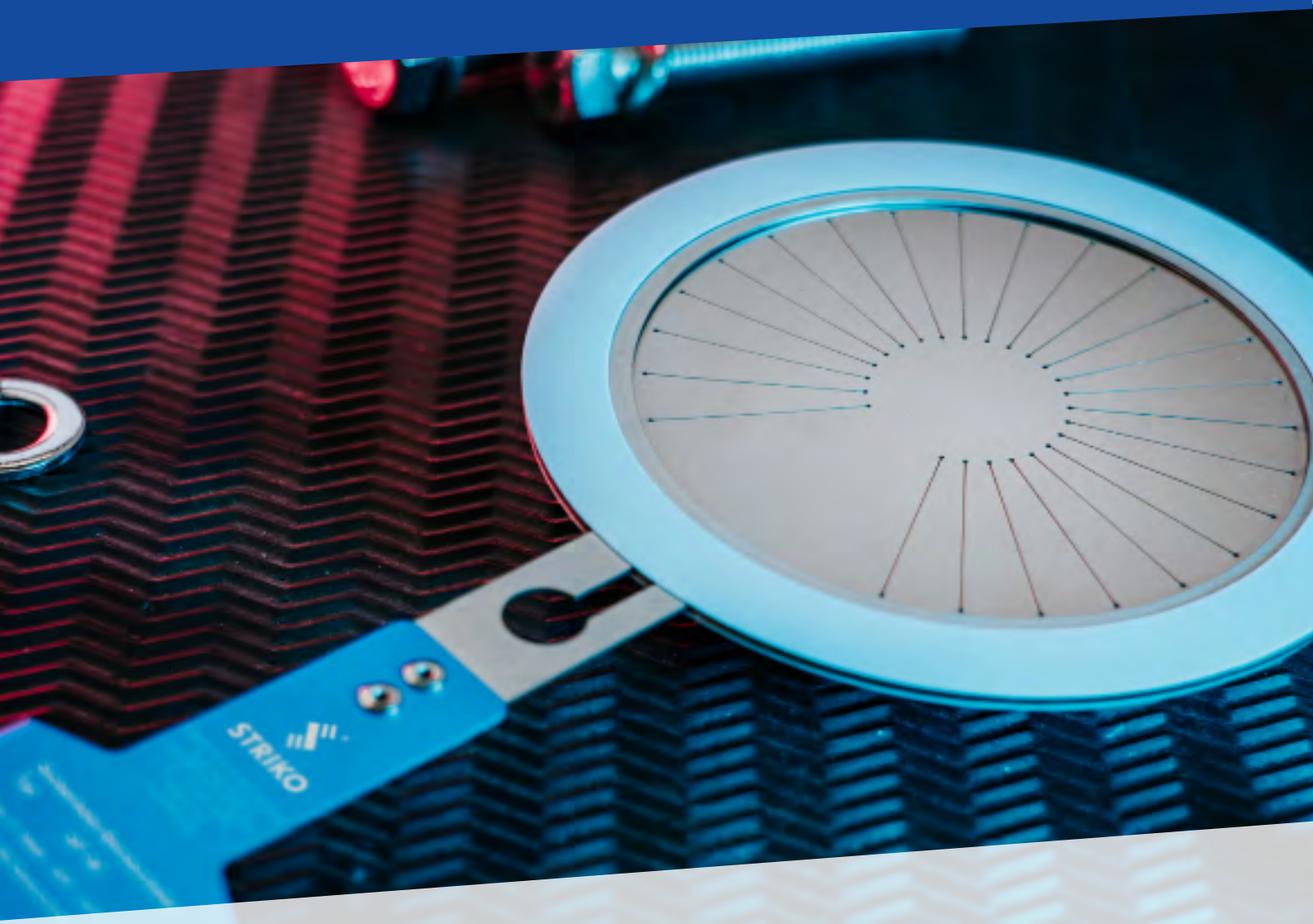
STRIKO
VERFAHRENSTECHNIK

# Rupture Discs and Accessories




You are safe with STRIKO.

# STRIKO - RUPTURE DISCS


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# FOREWORD

STRIKO Verfahrenstechnik is a reliable partner to the industry since 1973. The company is located in Reichshof-Wehnrath, right in the heart of Europe. From here we advise and supply well-known companies at home and abroad. In addition to our standard program, we offer you individually tailored solutions.

STRIKO maintains long-standing business relations with companies of the following industrial sectors:
- chemistry
- oil and gas
- plant engineering
- pharmaceutical industry
- food industry
- transport and logistics.

Our high-quality products, combined with engineering services, guarantee highest plant and process safety for your operations - as a result of many years of experience of our employees as well as the specialization in design of pressure vessels, according to the effective rules and standards. Product-specific parameters such as the required minimum net flow area of rupture discs, the pressure loss and mixing quality of static mixers and heating and cooling capacity for heat exchangers are calculated and the results checked in our own test facilities if required.

The project-related design is made in 3D models from which the drawings will be derived. We are pleased to provide our products also in STEP format AP202DIS according to ISO 10303.

An extensive warehouse and flexible production ensure high availability of customised products.

# STRIKO - RUPTURE DISCS

STRIKO pressure relief devices consist of a rupture disc and, according to the execution, a rupture disc holder. The same can be extended by a rupture indicating or alerting system. The rupture disc is a pressurized component and reacts within very short time to critical pressure in- or decrease in a system. If the rupture disc responds, there will be opened a vent area for protecting personnel, systems and environment.

The diverse rupture disc variants, made of metal and non-metal materials, cover a comprehensive range of nominal widths, bursting pressures and operating temperatures. Therefore, STRIKO rupture discs can guard precisely and reliably against overpressure and underpressure when being used in pressure devices such as pressure vessels, pipelines, reactors and other closed pressurized systems.

You will have always a factory-new and, above all, leak-free pressure relief device in your system because rupture discs, due to their function, must be replaced after pressure relief. This is an essential advantage over other pressure protection components which, in addition to higher leakage rates, often cause high costs concerning purchase and maintenance. A combination of rupture disc and safety relief valve is an alternative possibility.

Legal guidelines and demands on safety are the absolute minimum requirements for STRIKO. Our claim is to give you a safe feeling every day when operating your system. Wherever pressure appliances or systems are to be protected, STRIKO pressure relief devices are used reliably every day.

# SYMBOL EXPLANATION

applicable for state of aggregate




way of installation



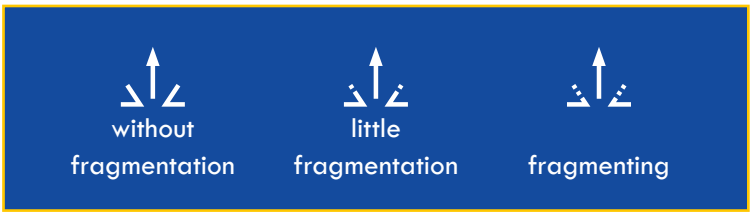

in combination with a safety valve




working pressure

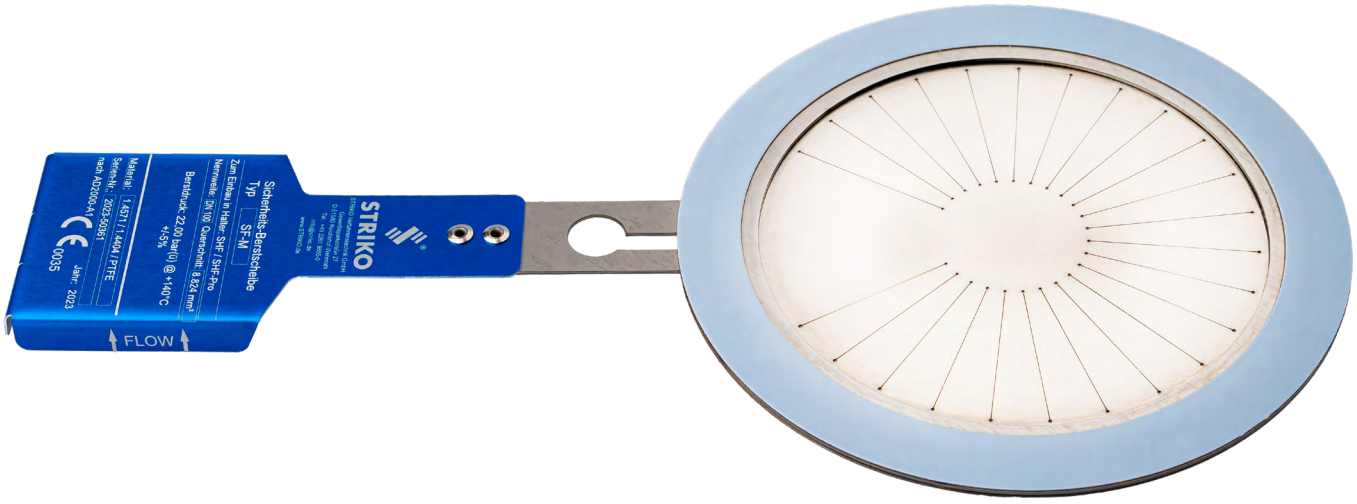



fragmentation




combinable with burst or leckage alerting systems






# SF-M

## THE VERSATILE

Rupture discs of the SF-M series are composite rupture discs in flat design. Due to their flat design, these rupture discs can also be inserted into cramped installation points. They can be installed directly between flange connections as well as in the respective STRIKO holder SHF or SHF Pro. Typical areas of application are processes with gases, liquids or multiphase media.

Individually designed to your application, rupture discs of the series SF-M can be designed for high as well and low burst pressures. In this connection, even lowest burst pressures of 15 mbar can be realized[1]. Static operating pressures make the series SF-M the ideal pressure protection component for your system. The wide range of nominal diameters and the wide range of temperature emphasize the versatility of the SF-M. Materials selected for the specific applications allow the use even in case of corrosive media.

MEDIUM

INSTALLATION

WORKING PRESSURE

FRAGMENTATION

ALERTING

## OVERVIEW OF YOUR ADVANTAGES:

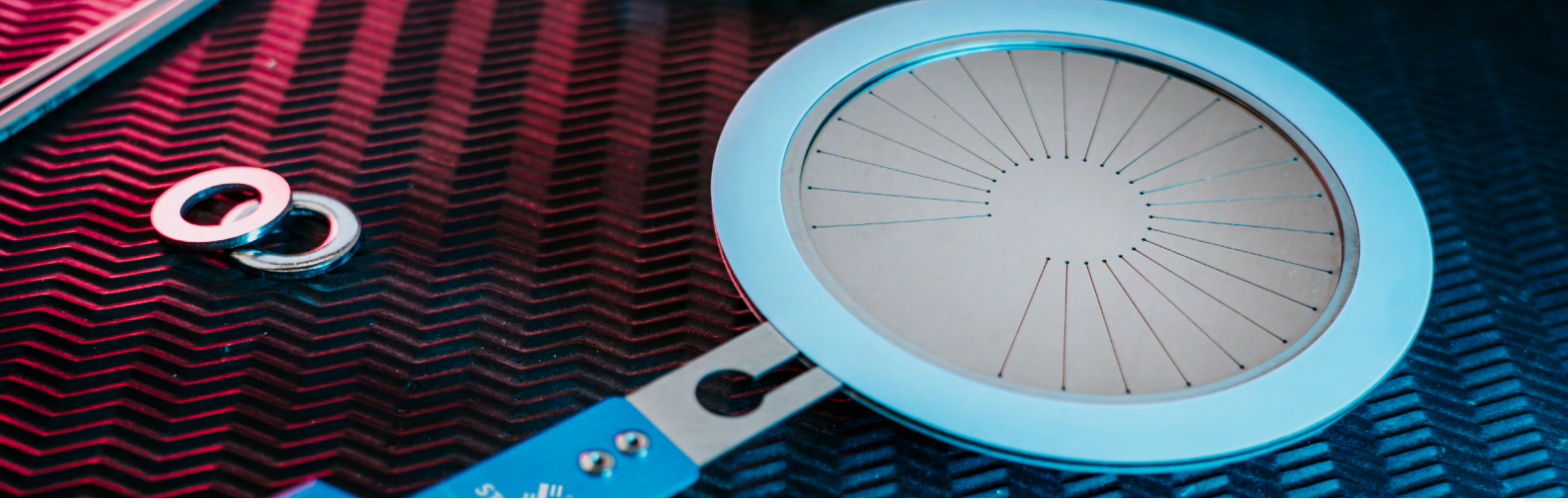
- → installation directly between flanges or in the associated holder
- → cost-efficient pressure protection component for versatile applications
- → minimal fragmenting response
- → ideal for being used in case of static operating pressures
- → lowest burst pressures (from 15 mbar) can be realized[1]
- → flat design
- → also available in special materials, such as Hastelloy®, Inconel® or Tantalum
- → use at temperatures up to 480 °C is possible[1]
- → operating ratio: up to 80 %[1]
- → nominal diameters: DN 15 to DN 800

## STRIKO - STANDARD

3D-nameplate and grounding lug for a potential equalisation of the rupture disc!



[1] Depending on the respective application.



| technical data of SF-M series | | | | | | |
|---|---|---|---|---|---|---|
| nominal diameter | | min. burst pressure | max. burst pressure | max. temperature | flow cross-section between flanges | flow cross-section in holder |
| DN | NPS | [bar(g)] | [bar(g)] | [°C] | [mm²] | [mm²] |
| 15 | ½“ | 0,500 | 20 | 480 | 226 | 63 |
| 20 | ¾“ | 0,400 | 20 | 480 | 314 | 63 |
| 25 | 1“ | 0,300 | 20 | 480 | 530 | 804 |
| 32 | 1 ¼“ | 0,250 | 16 | 480 | 1.134 | 1.520 |
| 40 | 1 ½“ | 0,200 | 16 | 480 | 1.320 | 1.520 |
| 50 | 2“ | 0,150 | 16 | 480 | 2.123 | 2.922 |
| 65 | 2 ½“ | 0,120 | 16 | 480 | 3.421 | 4.242 |
| 80 | 3“ | 0,100 | 16 | 480 | 4.901 | 5.541 |
| 100 | 4“ | 0,075 | 12 | 480 | 8.171 | 9.331 |
| 125 | 5“ | 0,060 | 10 | 480 | 12.076 | 12.867 |
| 150 | 6“ | 0,050 | 10 | 480 | 18.626 | 20.106 |
| 200 | 8“ | 0,035 | 10 | 480 | 32.047 | 34.966 |
| 250 | 10“ | 0,030 | 10 | 480 | 51.070 | 53.912 |
| 300 | 12“ | 0,025 | 10 | 480 | 66.052 | 69.500* |
| 350 | 14“ | 0,020 | 10 | 480 | 98.000* | 103.000* |
| 400 | 16“ | 0,018 | 6 | 480 | 119.459 | 125.000* |
| 450 | 18“ | 0,016 | 6 | 480 | 159.043 | 167.000* |
| 500 | 20“ | 0,015 | 6 | 480 | 184.745 | 194.000* |
| 600 | 24“ | 0,020 | 4 | 480 | 270.623 | 284.000* |
| 700 | 28“ | 0,020 | 2* | 480 | 368.528 | 387.000* |
| 800 | 32“ | 0,020 | 2* | 480 | 487.688 | 512.000* |

* approximate values

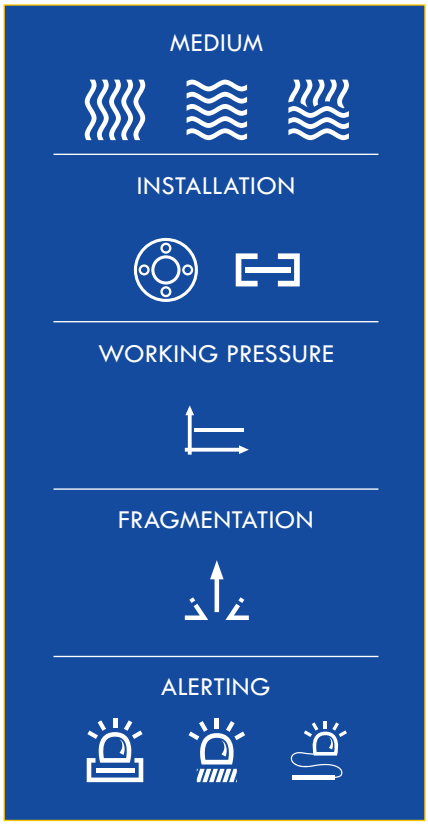



# SF-MD

## THE DOUBBLE-ACTING

The rupture disc SF-MD has been designed in such a manner that it responds, at defined overpressure, into the one direction and, at defined underpressure, into the other direction. Overpressure and underpressure are often different pressure values. The SF-MD can be installed directly between flange connections without holder, as well as in the associated STRIKO holder SHF or SHF Pro. The SF-MD is mainly used in tanks, but it can also be used in case of industrial processes with gases, liquids or multiphase media.

Due to its double-acting feature, the SF-MD takes on the function of two rupture discs at once. Materials, tailored to your application, allow the use of the SF-MD even in case of corrosive media and high temperatures.




## OVERVIEW OF YOUR ADVANTAGES:

- → installation directly between flanges or in the associated holder
- → ideal for applications that are to be protected simultaneously concerning overpressure and underpressure
- → minimally fragmenting response
- → lowest burst pressures (from 15 mbar) can be realized[1]
- → flat design
- → also available in special materials, such as Hastelloy®, Inconel® or Tantalum
- → use at tempeartures up to 480 °C is possible[1]
- → operating ratio: up to 80 %[1]
- → nominal diameters: DN 15 to DN 800

## STRIKO-STANDARD:

3D-nameplate and grounding lug for a potential equalisation of the rupture disc!



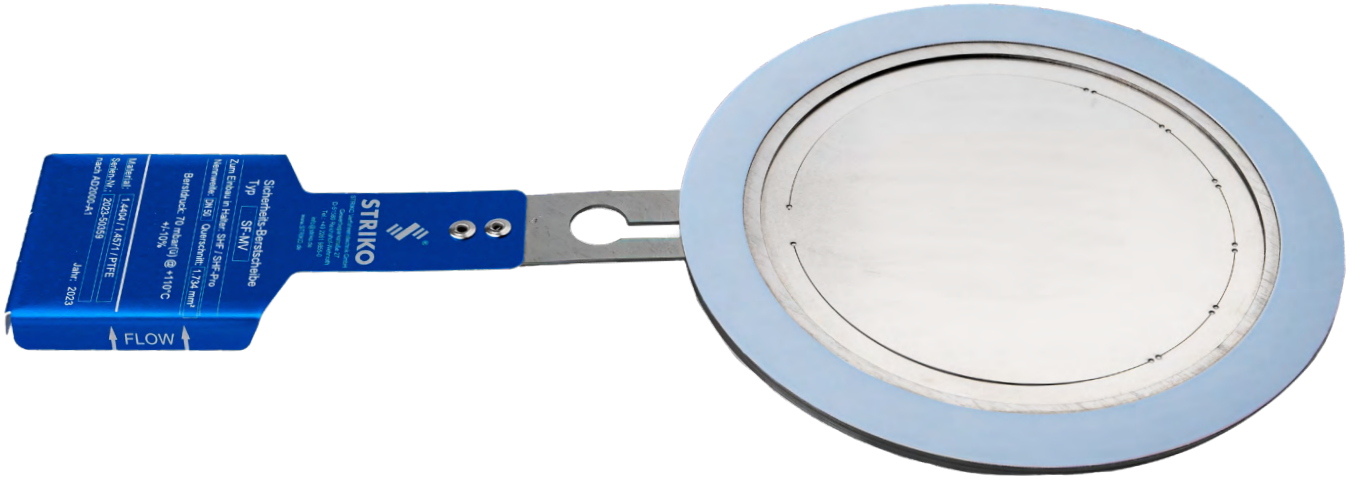
[1] Depending on the respective application.






| technical data of SF-MD series | | | | | | |
|---|---|---|---|---|---|---|
| nominal diameter | | min. burst press. for over- and underpress | max. burst press. for over- and underpress | maximum temperature | flow cross-section between flanges in overpress. direction | flow cross-section in holder in overpressure direction |
| DN | NPS | [bar(g)] | [bar(g)] | [°C] | [mm²] | [mm²] |
| 15 | ½“ | 0,500 | 20 | 480 | 226 | 63 |
| 20 | ¾“ | 0,400 | 20 | 480 | 314 | 63 |
| 25 | 1“ | 0,300 | 20 | 480 | 530 | 804 |
| 32 | 1 ¼“ | 0,250 | 16 | 480 | 1.134 | 1.520 |
| 40 | 1 ½“ | 0,200 | 16 | 480 | 1.320 | 1.520 |
| 50 | 2“ | 0,150 | 16 | 480 | 2.123 | 2.922 |
| 65 | 2 ½“ | 0,120 | 16 | 480 | 3.421 | 4.242 |
| 80 | 3“ | 0,100 | 16 | 480 | 4.901 | 5.541 |
| 100 | 4“ | 0,075 | 12 | 480 | 8.171 | 9.331 |
| 125 | 5“ | 0,060 | 10 | 480 | 12.076 | 12.867 |
| 150 | 6“ | 0,050 | 10 | 480 | 18.626 | 20.106 |
| 200 | 8“ | 0,035 | 10 | 480 | 32.047 | 34.966 |
| 250 | 10“ | 0,030 | 10 | 480 | 51.070 | 53.912 |
| 300 | 12“ | 0,025 | 10 | 480 | 66.052 | 69.500* |
| 350 | 14“ | 0,020 | 10 | 480 | 98.000* | 103.000* |
| 400 | 16“ | 0,018 | 6 | 480 | 119.459 | 125.000* |
| 450 | 18“ | 0,016 | 6 | 480 | 159.043 | 167.000* |
| 500 | 20“ | 0,015 | 6 | 480 | 184.745 | 194.000* |
| 600 | 24“ | 0,020 | 4 | 480 | 270.623 | 284.000* |
| 700 | 28“ | 0,020 | 2* | 480 | 368.528 | 387.000* |
| 800 | 32“ | 0,020 | 2* | 480 | 487.688 | 512.000* |

* approximate values

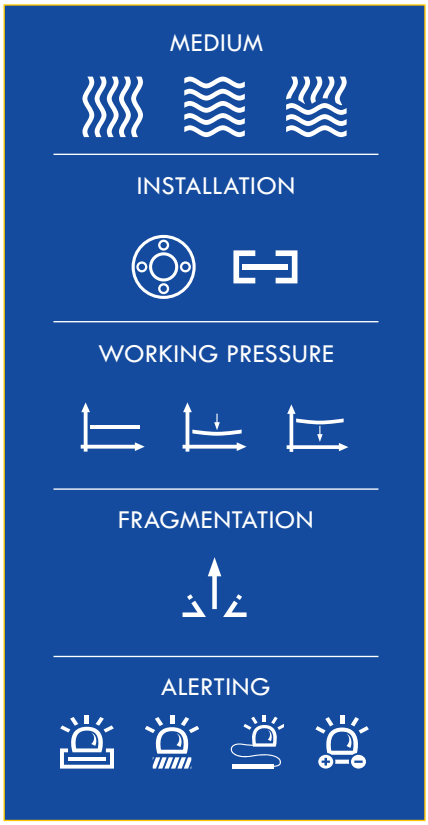



# SF-MV

## THE VACCUM RESITANT

The rupture disc of the series SF-MV extends the SF-M series by a rupture disc with integrated vacuum support. The vacuum support safeguards the rupture disc against response into the wrong direction. Like the rupture disc SF-M, the rupture disc SF-MV can be installed directly between flange connections as well as in the associated STRIKO holder SHF or SHF Pro. Typical areas of application are processes with gases, liquids or multiphase media. Due to the integrated vacuum support, the SF-MV is excellently suitable for being applied with full vacuum or high back pressures.[1]

Individually tailored to your application, the rupture disc SF-MV can be designed for high and low burst pressures. Even lowest burst pressures from 35 mbar can be realized in this connection.[2] Nominal diameters from DN 15 to DN 200 and the wide temperature range emphasize the versatility of the SF-MV series. In case of nominal diameters up from DN 250, the SF-M is protected by a permanent support (PVS or PÜS) against response into wrong direction. Materials, selected in dependence on the respective case of application, allow the use of the SF-MV also in case of processes with corrosive media.




## OVERVIEW OF YOUR ADVANTAGES:

- → installation directly between flanges or in the associated holder
- → cost-efficient pressure protection component for versatile applications
- → minimally fragmenting response
- → ideal for being used in case of full vacuum or high back pressures[1]
- → lowest burst pressures (from 35 mbar) can be realized[2]
- → flat design
- → also available in special materials, such as Hastelloy®, Inconel® or Tantalum
- → use at temperatures up to 480 °C is possible[2]
- → operating ratio: up to 80 %[2]
- → nominal diameters: DN 15 to DN 200[3]

## STRIKO-STANDARD

3D-nameplate and grounding lug for a potential equalisation of the rupture disk!



[1] The amount of the admissible back pressure is related to the specified burst pressure.

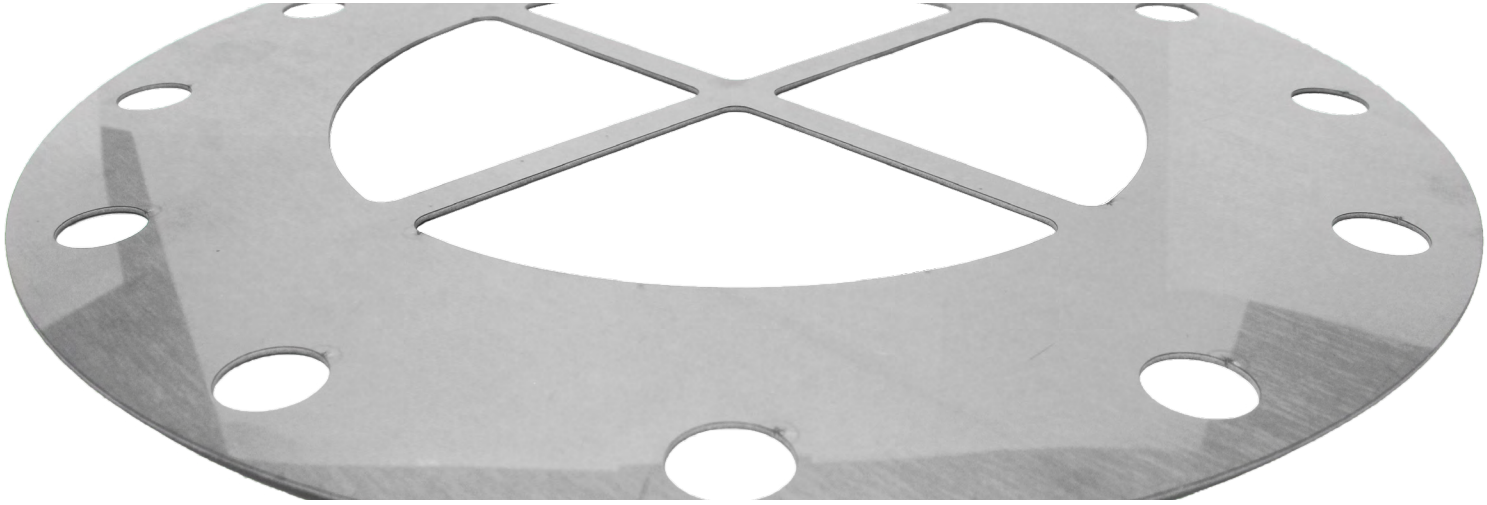
[2] Depending on the respective application.

[3] For larger nominal diameters we recommend the combination of the SF-M with a permanent support (PVS or PÜS).






| technical data of SF-MV series | | | | | | |
|---|---|---|---|---|---|---|
| nominal diameter | | min. burst pressure | max. burst pressure | max. temperature | flow cross-section between flanges | flow cross-section in holder |
| DN | NPS | [bar(g)] | [bar(g)] | [°C] | [mm²] | [mm²] |
| 15 | ½“ | 0,500 | 20 | 480 | 132 | 63 |
| 20 | ¾“ | 0,400 | 20 | 480 | 201 | 63 |
| 25 | 1“ | 0,300 | 20 | 480 | 380 | 615 |
| 32 | 1 ¼“ | 0,250 | 16 | 480 | 908 | 1.256 |
| 40 | 1 ½“ | 0,200 | 16 | 480 | 1.075 | 1.256 |
| 50 | 2“ | 0,150 | 16 | 480 | 1.809 | 2.551 |
| 65 | 2 ½“ | 0,120 | 16 | 480 | 2.922 | 3.848 |
| 80 | 3“ | 0,100 | 16 | 480 | 4.185 | 4.901 |
| 100 | 4“ | 0,075 | 12 | 480 | 7.088 | 8.332 |
| 125 | 5“ | 0,060 | 10 | 480 | 11.499 | 10.935 |
| 150 | 6“ | 0,050 | 10 | 480 | 16.971 | 18.626 |
| 200 | 8“ | 0,035 | 10 | 480 | 29.867 | 33.006 |



# PVS / PÜS

## THE PERMANENT SUPPORT

A PVS (permanent vacuum support) and a PÜS (permanent overpressure [german: Überdruck] support) safeguard a SF-M against response into wrong direction. The PVS will be installed on the product side and the PÜS will be installed on the atmospheric side. They are not damaged by response of a rupture disc and therefore they can be used anew. In dependence on the specified burst pressure of the associated rupture disc, the permanent support has been designed in form of cross or with circular cutouts. The PVS and the PÜS, inclusive of the associated rupture disc, can be installed between flange connections as well as in the STRIKO holder SHF or SHF Pro.

**technical data PVS / PÜS**

| nominal diameter | | flow cross-section* |
|---|---|---|
| DN | NPS | [mm²] |
| 250 | 10“ | 34.854 |
| 300 | 12“ | 49.392 |
| 350 | 14“ | 68.750 |
| 400 | 16“ | 85.457 |
| 450 | 18“ | 110.309 |
| 500 | 20“ | 138.341 |
| 600 | 24“ | 190.851 |
| 700 | 28“ | 275.749 |
| 800 | 32“ | 385.079 |

* The flow cross-sections of PVS / PÜS apply to respected ruture disc‘s flow cross-section.

## OVERVIEW OF YOUR ADVANTAGES:

- → can be installed, together with the rupture disc, between flange connections or in the associated holder
- → ideal solution in case of nominal diameters up from DN 250 and in case of processes for high back pressures or vacuum
- → also available in special materials, such as Hastelloy®, Inconel® or Tantalum
- → flat design
- → nominal diameters: DN 250 to DN 800[1]

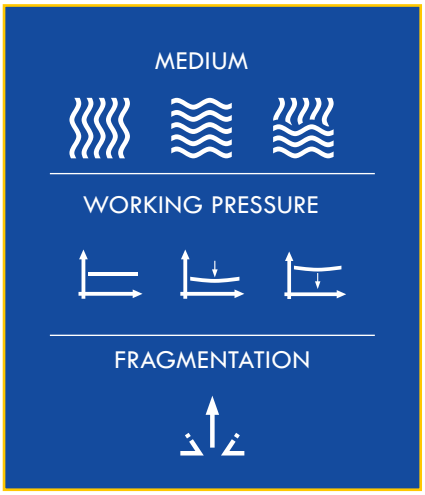
[1] For special applications, the PVS and PÜS can also be built with a smaller nominal diameter.



# SF-M-TB

## THE TANK RUPTURE DISC






Tank trucks and tank wagons are protected by means of STRIKO tank rupture discs against inadmissible overpressure and/or underpressure. The flat tank rupture disc is available in the versions SF-M-TB (vacuum resitant with product-side PTFE protection foil) and SF-MD-TB (double-acting). Gases, liquids or multiphase media are transported on our roads and tracks safely with the STRIKO tank rupture discs. A drawn centering collar enables reliable mounting and centering of the rupture disc between two flanges. Tank rupture discs for very common burst pressures are available from stock in nominal diameters of DN 65 and DN 80, thus offering maximum flexibility and fast availability.

## OVERVIEW OF YOUR ADVANTAGES:

- → reliable pressure protection of tank trucks and tank wagons
- → minimal fragmentation of PTFE parts
- → SF-M-TB vacuum resistant
- → with product-side PTFE protection foil (liner)
- → SF-MD-TB as ideal protection against overpressure and underpressure with only one rupture disc
- → flat design
- → also available in special materials, such as nickel, Hastelloy®, Inconel® or Tantalum
- → nominal diameters: DN 65 and DN 80 for very common burst pressures and materials are available from stock
- → operating ratio: up to 80 %

## STRIKO - STANDARD

3D-nameplate and grounding lug for a potential equalisation of the rupture disc!



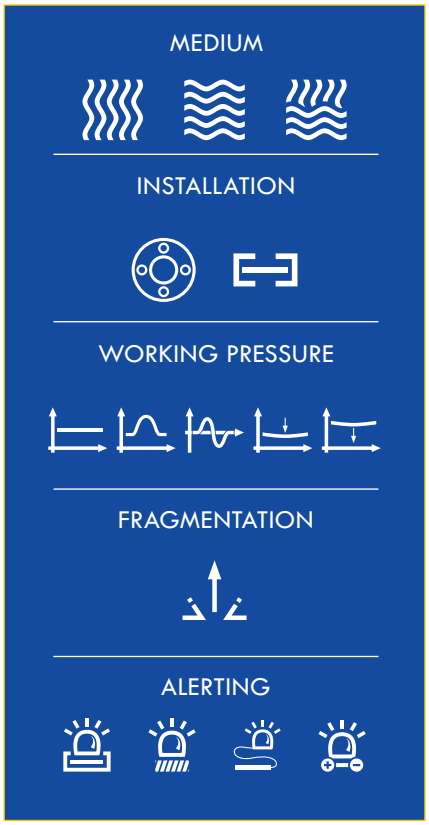



# SZ-M / SZ-MV

## THE DOMED COMPOSITE RUPTURE DISC

Rupture discs of the series SZ-M are composite rupture discs in domed design. These rupture discs are used when flat rupture discs are fatigue too quickly, because of pressure fluctuations. They can be installed directly between flange connections as well as in the associated STRIKO holder SHZ or SHZ Pro. Typical ranges of application are processes with gases, liquids or multiphase media. The integrated vacuum support of the SZ-MV allows also the use with full vacuum or high back pressures.[1]

Individually tailored to your application, rupture discs of the series SZ-M can be designed for high as well as for low burst pressures. Most commonly, these rupture discs are used in processes with pulsating pressures and by installation directly between flanges with larger nominal diameters.




## OVERVIEW OF YOUR ADVANTAGES:

- → can be used directly between flanges or in the associated holder
- → ideal for being used with pulsating operating pressures
- → can be used with full vacuum or high back pressures[1] (SZ-MV)
- → pressure protection for versatile applications
- → available in special materials, such as Hastelloy® or Inconel®
- → use at temperatures up to 480 °C is possible[2]
- → operating ratio: up to 80 %[2]

## STRIKO - STANDARD

3D-nameplate and grounding lug for a potential equalisation of the rupture disc!



[1] The amount of admissible back pressure is related to the specified burst pressure.

[2] Depending on the respective application.

| technichal data of SZ-M series | | | | | | |
|---|---|---|---|---|---|---|
| nominal diameter | | min. burst pressure | max. burst pressure | max. temperature | flow cross-section between flanges | flow cross-section in holder |
| DN | NPS | [bar(g)] | [bar(g)] | [°C] | [mm²] | [mm²] |
| 50 | 2“ | 0,700 | 16 | 480 | 2.123 | 2.922 |
| 65 | 2 ½“ | 0,700 | 16 | 480 | 3.421 | 4.242 |
| 80 | 3“ | 0,500 | 16 | 480 | 4.901 | 5.541 |
| 100 | 4“ | 0,300 | 12 | 480 | 8.171 | 9.331 |
| 125 | 5“ | 0,300 | 10 | 480 | 12.076 | 12.867 |
| 150 | 6“ | 0,200 | 10 | 480 | 18.626 | 20.106 |
| 200 | 8“ | 0,100 | 10 | 480 | 32.047 | 34.966 |
| 250 | 10“ | 0,060 | 10 | 480 | 51.070 | 53.912 |
| 300 | 12“ | 0,050 | 10 | 480 | 66.052 | 69.500* |
| 350 | 14“ | 0,045 | 10 | 480 | 98.000* | 103.000* |
| 400 | 16“ | 0,040 | 6 | 480 | 119.459 | 125.000* |
| 450 | 18“ | 0,035 | 6 | 480 | 159.043 | 167.000* |
| 500 | 20“ | 0,030 | 6 | 480 | 184.745 | 194.000* |

| technichal data of SZ-MV series | | | | | | |
|---|---|---|---|---|---|---|
| nominal diameter | | min. burst pressure | max. burst pressure | max. temperature | flow cross-section between flanges | flow cross-section in holder |
| DN | NPS | [bar(g)] | [bar(g)] | [°C] | [mm²] | [mm²] |
| 50 | 2“ | 0,700 | 16 | 480 | 1.809 | 2.551 |
| 65 | 2 ½“ | 0,700 | 16 | 480 | 2.922 | 3.848 |
| 80 | 3“ | 0,500 | 16 | 480 | 4.185 | 4.901 |
| 100 | 4“ | 0,300 | 12 | 480 | 7.088 | 8.332 |
| 125 | 5“ | 0,300 | 10 | 480 | 11.499 | 10.935 |
| 150 | 6“ | 0,200 | 10 | 480 | 16.971 | 18.626 |
| 200 | 8“ | 0,100 | 10 | 480 | 29.867 | 33.006 |
| 250 | 10“ | 0,060 | 10 | 480 | 47.500* | 51.070 |
| 300 | 12“ | 0,050 | 10 | 480 | 62.500* | 65.000* |
| 350 | 14“ | 0,045 | 10 | 480 | 94.000* | 98.000* |
| 400 | 16“ | 0,040 | 6 | 480 | 114.000* | 120.000* |
| 450 | 18“ | 0,035 | 6 | 480 | 153.000* | 161.000* |
| 500 | 20“ | 0,030 | 6 | 480 | 178.000* | 187.000* |

* approximate values

# SZ-X

THE DOUBLE SAFE






Rupture discs of the series SZ-X are convex-domed cross-scored rupture discs. Installed in the associated STRIKO holder SHZ or SHZ Pro, these rupture discs fulfill highest requirements on tightness. The series is used most frequently in processes with medium to high pressures as well as volatile media. Due to its non-fragmenting bursting, the rupture disc can be installed easily in combination with a safety relief valve.

The SZ-X protects your processes with gases, liquids or multiphase media reliably. Due to low burst tolerances of up to +/-5 %[1] and an operating ratio of 90 %, the rupture discs of the SZ-X series protect your system even under permanently high load. Furthermore, the SZ-X is distinguished by the characteristic „Fail-Safe“. Incorrect installation results in bursting of the SZ-X with or below the specified burst pressure.

## OVERVIEW OF YOUR ADVANTAGES:

- → meets the highest requirements on tightness (metallic sealing in the STRIKO holder SHZ or SHZ Pro)
- → recommended for being used in front of a safety relief valve
- → non-fragmenting response
- → medium to high pressures (120 bar)[1]
- → available in special materials, such as Hastelloy® or Inconel®
- → can be used at temperatures of up to 80 °C[1]
- → operating ratio: 90%
- → low bursting tolerances:: from +/- 5 %[1]

## STRIKO - STANDARD

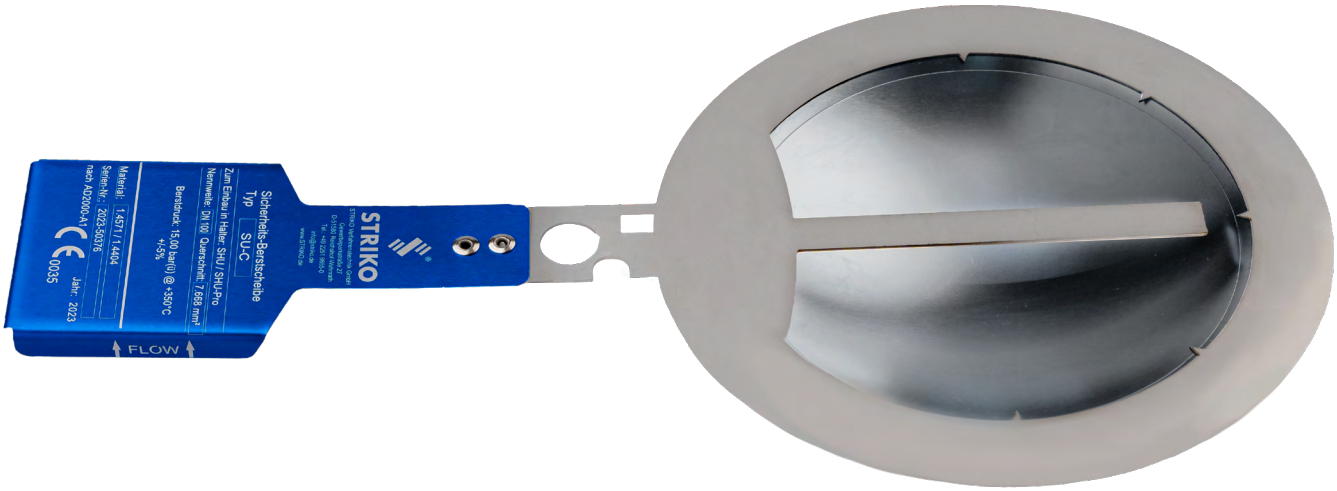
3D-nameplate and grounding lug for a potential equalisation of the rupture disc!



[1] Depending on the respective application.



| technical data of SZ-X series | | | | | |
|---|---|---|---|---|---|
| Nominal diameter | | min. burst pressure | max. burst pressure | max. temperature | flow cross-section in holder |
| DN | NPS | [bar(g)] | [bar(g)] | [°C] | [mm²] |
| 25 | 1“ | 15 | 120 | 480 | 794 |
| 40 | 1 ½“ | 10 | 120 | 480 | 1.555 |
| 50 | 2“ | 8 | 120 | 480 | 2.855 |
| 65 | 2 ½“ | 5 | 100 | 480 | 5.768 |
| 80 | 3“ | 5 | 100 | 480 | 5.768 |
| 100 | 4“ | 4 | 80 | 480 | 9.676 |




# SU-C

THE FLOW-OPTIMIZED

Rupture discs of the series SU-C are concave domed C-scored rupture discs. Installed in the associated STRIKO holder SHU or SHU Pro, these rupture discs fulfill highest requirements on tightness. The SU-C protects processes with gases, vapors and liquids with gas cushion reliably. Due to its non-fragmenting bursting and its largest possible flow cross-section, the SU-C is particularly well suited for being used in front of a safety relief valve. In this connection, its back pressure capacity, of about 140 %[1] of the specified burst pressure, ensures that a subsequently added safety relief valve can be tested in installed state.

Due to low burst tolerances of up to +/-5 %[1] and an operating ratio of 90 %, the rupture discs of the series SU-C protect your system reliably, even under permanently high load.

## OVERVIEW OF YOUR ADVANTAGES:

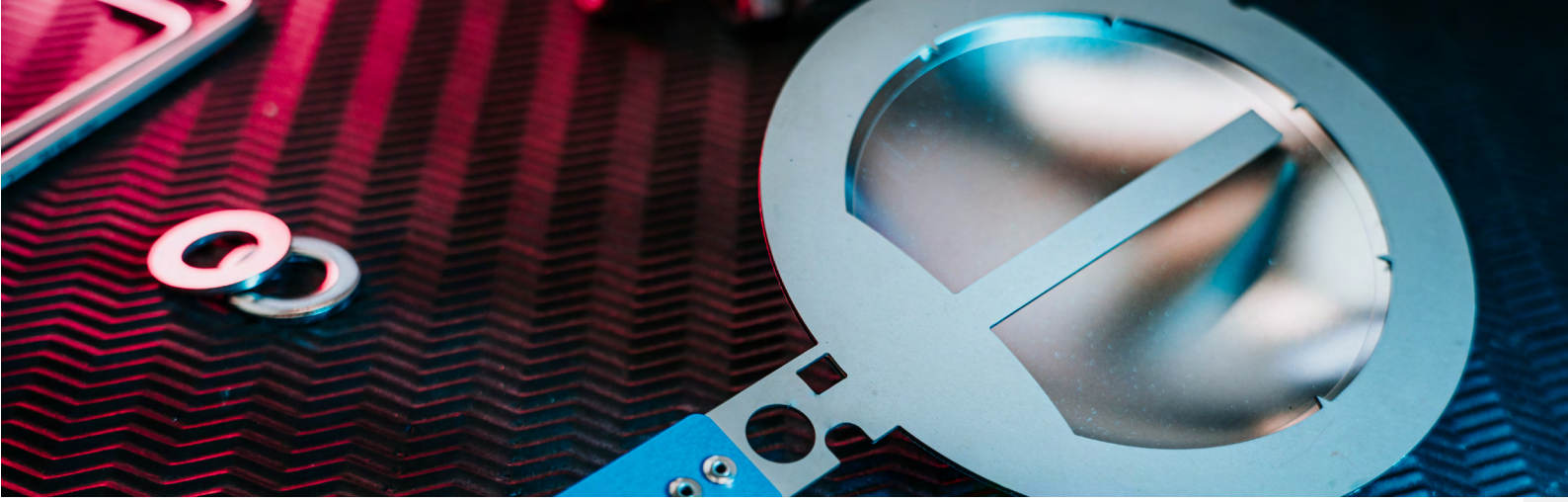
- → meets highest requirements on tightness (metallic sealing in the STRIKO holder SHU or SHU Pro)
- → suitable for being used in front of safety relief valve
- → non-fragmenting response
- → medium to high pressures
- → available in special materials, such as Hastelloy® or Inconel®
- → ideal for media that tend to caking
- → can be used at temperatures of up to 480 °C[1]
- → operating ratio: 90 %
- → low bursting tolerances: from +/- 5 %[1]

## STRIKO - STANDARD

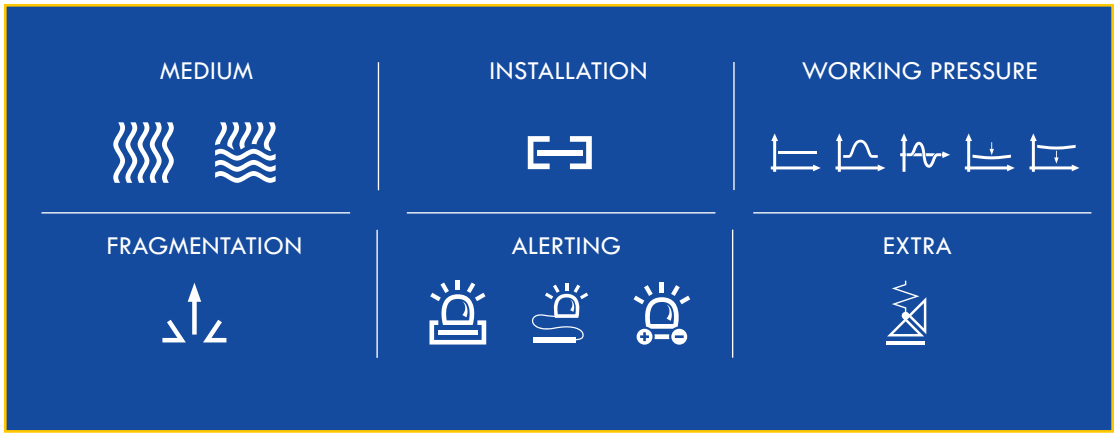
3D-nameplate and grounding lug for a potential equalisation of the rupture disc!



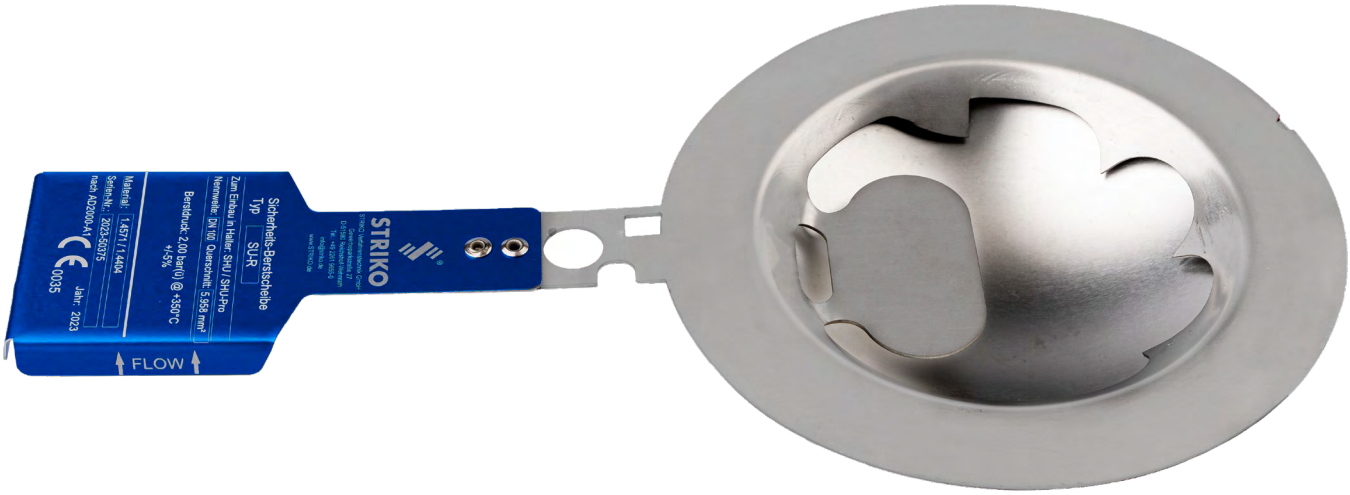
[1] Depending on the respective application.








| technical data SU-C series | | | | | |
|---|---|---|---|---|---|
| Nominal diameter | | min. burst pressure | max. burst pressure | max. temperature | flow cross-section in holder |
| DN | NPS | [bar(g)] | [bar(g)] | [°C] | [mm²] |
| 25 | 1“ | 2,8 | 80 | 480 | 705 |
| 40 | 1 ½“ | 2 | 50 | 480 | 1.453 |
| 50 | 2“ | 1,5 | 47 | 480 | 2.618 |
| 65 | 2 ½“ | 1,2 | 35 | 480 | 5.343 |
| 80 | 3“ | 1,2 | 35 | 480 | 5.343 |
| 100 | 4“ | 1 | 30 | 480 | 7.668 |




# SU-R

THE ROBUST

Rupture discs of the series SU-R are concave domed burst safety devices. The bursting foil on the robust shear ring will be torn up in case of response. Installed in the associated STRIKO holder SHU or SHU Pro, these rupture discs fulfill highest requirements on tightness. The SU-R protects processes with gases, vapors and liquids with gas cushion reliably. Due to its non-fragmenting bursting the SU-R is particularly well suited for being used in front of safety relief valves. In this connection, its back pressure capacity, of about 140 %[1] of the specified burst pressure, ensures that a subsequently added safety relief valve can be tested in installed state.

For pulsating operating pressures of medium to high intensity, the SU-R is an ideal pressure protection component for your system. Materials selected for the specific application allow the use even with corrosive media and with media that tend to caking. With an operating ratio of 90 %, the rupture discs of the SU-R series protect your system reliably, even under permanently high load.

## OVERVIEW OF YOUR ADVANTAGES:

- → meets highest requirements on tightness (metallic sealing in the STRIKO holder SHU or SHU Pro)
- → recommended for being used in front of safety relief valve
- → non-fragmenting response
- → medium to high pressures
- → available in special materials, such as Hastelloy® or Inconel®
- → ideal for media that tend to caking
- → ideal in case of pulsating operating pressures
- → vacuum-sealed and back pressure resistant (at least 140 % of burst pressure)[1]
- → can be used at temperatures of up to 480 °C[1]
- → operating ratio: 90 %

## STRIKO - STANDARD

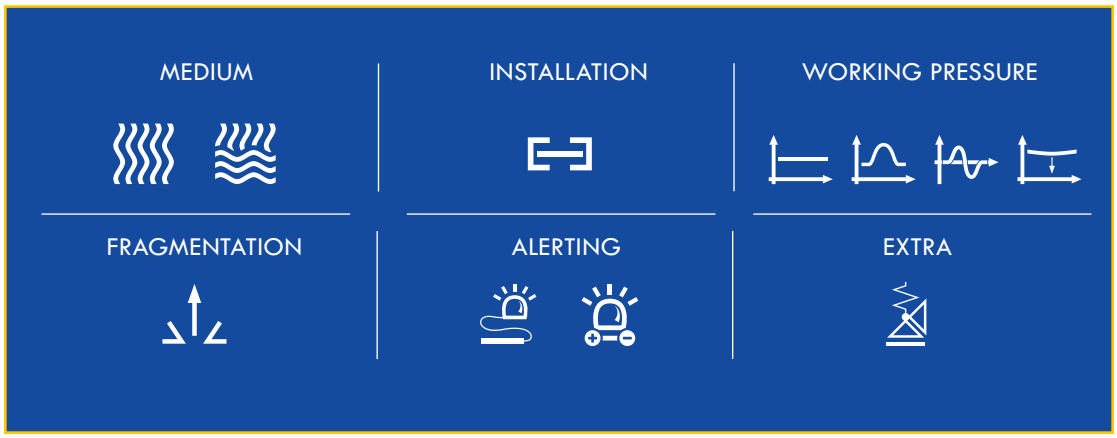
3D-nameplate and grounding lug for a potential equalisation of the rupture disc!



[1] Depending on the respective application.






| technical data of SU-R | | | | | |
|---|---|---|---|---|---|
| Nominal diameter | | min. burst pressure | max. burst pressure | max. temperature | Flow cross-selection in holder |
| DN | NPS | [bar(g)] | [bar(g)] | [°C] | [mm²] |
| 20 | ¾“ | 5 | 61,7 | 480 | 254 |
| 25 | 1“ | 3 | 61,7 | 480 | 530 |
| 32 | 1 ¼“ | 3 | 61,7 | 480 | 895 |
| 40 | 1 ½“ | 2 | 61,7 | 480 | 895 |
| 50 | 2“ | 1 | 61,7 | 480 | 1.594 |
| 65 | 2 ½“ | 0,6 | 25 | 480 | 3.056 |
| 80 | 3“ | 0,6 | 25 | 480 | 3.056 |
| 100 | 4“ | 0,5 | 15 | 480 | 5.958 |
| 125 | 5“ | 0,5 | 13 | 480 | 7.154 |
| 150 | 6“ | 0,5 | 10 | 480 | 11.572 |
| 200 | 8“ | 0,5 | 8 | 480 | 18.470 |

# RUPTURE DISC AND SAFETY VALVE

## COMBINATION

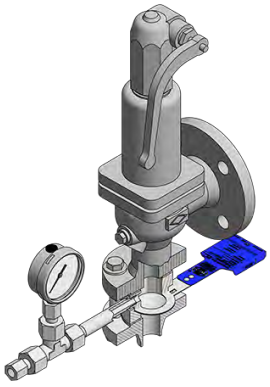
Even today, the combination of rupture disc and safety relief valve is regarded as state-of-the-art within the range of pressure protection components. Only by combining these two technologies, all possibilities for protecting personnel, equipment and environment are fully exhausted.

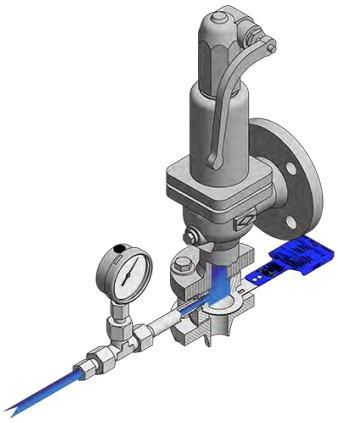
In the past often were weighed the advantages of a rupture disc and the characteristics of a safety relief valve and, depending on the process conditions and media, there has been decided which pressure protection is to be used. A combination of the two autarkic pressure protection components has recently turned out to be the technically optimal solution.

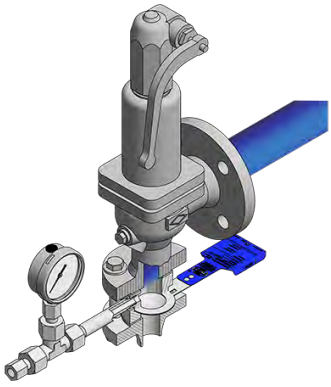
If a safety relief valve has been installed as the only pressure protection component it may be difficult to guarantee a reliable function. Especially in case of demanding process conditions, such as in case of sticky, hardening, corrosive or viscous media, a safety relief valve reaches its limits quickly.

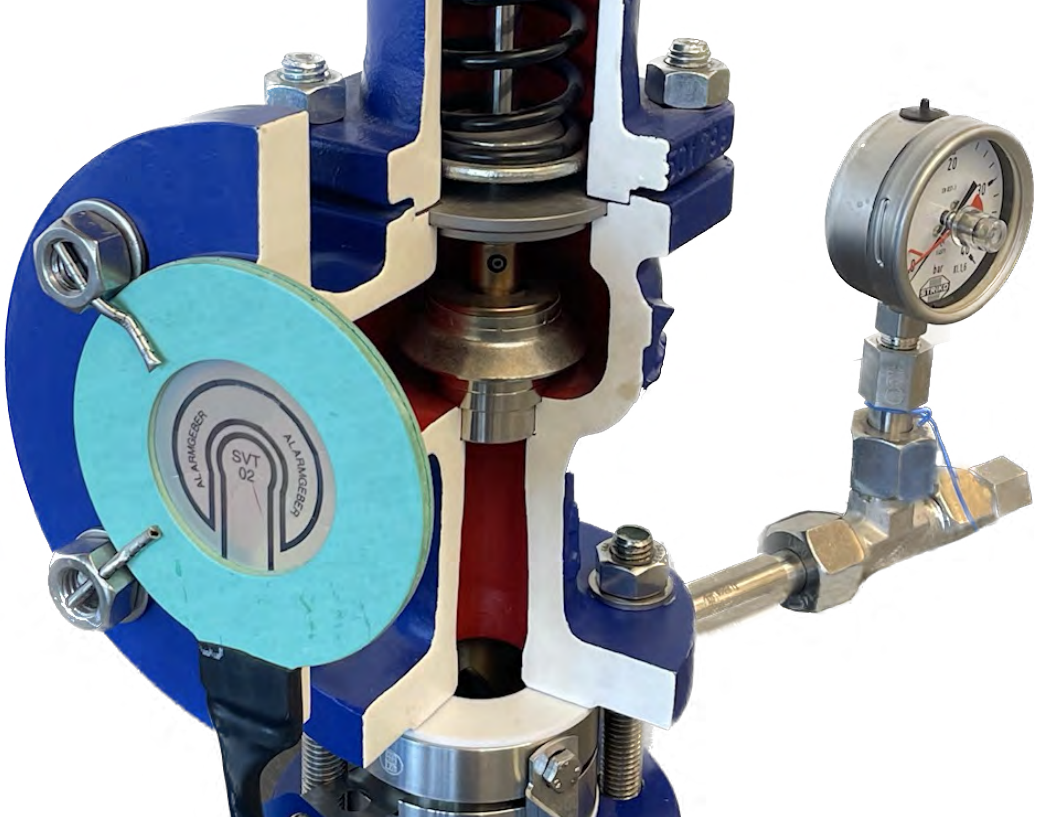
A STRIKO rupture disc ensures absolute tightness in the process. Cakes and other contaminants don't affect the proper functioning of the rupture disc designed for the process. Installed in front of a safety relieve valve the ruprure disc has the function of the first barrier which ensures the functional efficiency of the safety relief valve in spite of unfavorable operating conditions. In this connection, the rupture disc not only protects the safety relief valve against contamination on seat and cone, but also protects the spring and other components being no longer under direct media pressure due to the rupture disc placed ahead.

A rupture disc, added in front of the safety relief valve, ensures also the correct function of the safety relief valve with slowly increasing pressures. So, an undesirable lifting of the valve seat will be prevented and the loss of media, even in case of volatile media, will be reduced to a minimum. A loss of cost intensive media is consequently a thing of the past. The combination of a safety relief valve with a STRIKO rupture disc ensures simultaneously the permanent compliance with applicable regulations and laws. In case of aggressive or corrosive media, the safety relief valve can be made from cost-effective materials as it is isolated from the medium when being combined with a rupture disc. Thus, the budgeted costs are double reduced as, because of the rupture disc placed ahead, the maintenance effort is reduced.












As the medium is very close to the rupture disc, the safety relief valve must not be cleaned and, in dependending on the upstream rupture disc type, prescribed tests of the safety relief valve can even be carried out while the process is running. The expensive removal of the safety relief valve as well as the standstill of process will also be omitted. In this case it should be noted that a STRIKO rupture disc from the SU series installed upstream of the safety valve can also withstand a back pressure corresponding to 1.4 times the specified burst pressure.
The space between rupture disc and safety relief valve is to be pressure-monitored and protected by means of relief valve, when using the solution suggested by STRIKO. The pressure monitoring can be carried out in various ways: Whether manually with classic pressure gauge, with classic pressure sensor or online and without cables with sensors of the WirelessHART Technology - Industrie 4.0 sends its regards!

Finally should be mentioned that STRIKO rupture discs can be combined with safety relief valves of all common manufacturers. STRIKO Verfahrenstechnik is pleased to advise you concerning design and installation of this holistic solution.

## OVERVIEW OF YOUR ADVANTAGES:

- → absolute tightness and consequently reduced loss of media
- → almost conform to TA-Luft
- → no lifting of the valve seat in case of pressure fluctuations or slowly increasing pressures
- → no permanent load of the spring in the safety relief valve
- → no deposits on valve seat or valve cone
- → no particles, adherences or contaminations in the safety relief valve
- → safety relief valve can be checked with running operation
- → isolation of the safety relief valve against aggressive or corrosive media
- → free selection of materials of the safety relief valve
- → STRIKO rupture discs can be combined with all common safety relief valves

## STRIKO - STANDARD

3D-nameplate and grounding lug for a potential equalisation of the rupture disc!



[1] Depending on the respective application.




# SF-M-S / SF-MV-S

## UNIVERSAL RUPTURE DISC FOR HYGIENIC APPLICATIONS

The aseptic rupture discs of the series SF-M-S and SF-MV-S are composite rupture discs designed for hygienic applications. They can be used in TriClamp connections and in NA-Connect connections. Processes with pure liquids, gases or multiphase media are the typical application ranges of the SF-M-S and SF-MV-S. Due to the integrated vacuum support, the SF-MV-S is ideal for applications with full vacuum or high back pressures.[1]

Individually designed to your application, rupture discs of the series SF-M-S and SF-MV-S can be designed for high and low burst pressures. In this connection, even lowest burst pressures from 125 mbar can be realized.[2] Carefully selected sealing materials meet the highest sealing requirements in your process. The wide range of nominal diameters and pressures emphasizes the versatility of the SF-M-S and SF-MV-S.




## OVERVIEW OF YOUR ADVANTAGES:

- → can be used in Tri-Clamp and NA-Connect connections
- → cost-effective pressure protection for versatile applications
- → minimally fragmenting response
- → ideal for being used in case of static operating pressures
- → can be used with full vacuum or high back pressures[1] (SF-MV-S)
- → lowest burst pressures (from 125 mbar) can be realized[2]
- → available in special materials, such as Hastelloy®, Inconel® or Tantalum
- → GYLON BIO-PRO® seals[3] as well as seals in PTFE pure white[3] or EPDM[3] meet highest requirements on tightness
- → flat design
- → use at temperatures up to 260 °C possible[2]
- → operating ratio: 80 %

## STRIKO - STANDARD

3D-nameplate and grounding lug for a potential equalisation of the rupture disc!



[1] The amount of the admissible back pressure is related to the specified burst pressure.

[2] Depending on the respective application.

[3] Conform to FDA and USP Class VI and free of animal ingredients.

| technical data of SF-M-S / SF-MV-S series | | | | column A acc. to DIN 32676 | | |
|---|---|---|---|---|---|---|
| Nominal diameter | min. burst pressure | max. burst pressure [bar(g)] | | max. temperature | flow cross-section [mm²] | |
| DN | [bar(g)] | TC* | NA* | [°C] | **SF-M-S** | **SF-MV-S** |
| 25 | 0,500 | 7 | 14** | 260 | 452 | 314 |
| 32 | 0,400 | 7 | 14** | 260 | 615 | 452 |
| 40 | 0,320 | 7 | 14** | 260 | 1.017 | 804 |
| 50 | 0,250 | 7 | 14** | 260 | 1.809 | 1.520 |
| 65 | 0,200 | 6 | 12** | 260 | 3.216 | 2.827 |
| 80 | 0,160 | 6 | 12** | 260 | 4.901 | 4.417 |
| 100 | 0,125 | 6 | 10** | 260 | 7.542 | 7.088 |

| technical data of SF-M-S / SF-MV-S series | | | | column B acc. to DIN 32676 | | |
|---|---|---|---|---|---|---|
| Nominal diameter | min. burst pressure | max. burst pressure [bar(g)] | | max. temperature | flow cross-section [mm²] | |
| DN/OD | [bar(g)] | TC* | NA* | [°C] | **SF-M-S** | **SF-MV-S** |
| 26,9 | 0,500 | 7 | 14** | 260 | 346 | 226 |
| 33,7 | 0,400 | 7 | 14** | 260 | 615 | 452 |
| 42,4 | 0,320 | 7 | 14** | 260 | 1.017 | 804 |
| 48,3 | 0,250 | 7 | 14** | 260 | 1.385 | 1.134 |
| 60,3 | 0,200 | 6 | 12** | 260 | 2.290 | 1.963 |
| 76,1 | 0,160 | 6 | 12** | 260 | 3.848 | 3.421 |
| 88,9 | 0,125 | 6 | 10** | 260 | 5.281 | 4.778 |

| technical data of SF-M-S / SF-MV-S series | | | | column C acc. to DIN 32676 | | |
|---|---|---|---|---|---|---|
| Nominal diameter | min. burst pressure | max. burst pressure [bar(g)] | | max. temperature | flow cross-section [mm²] | |
| Inch | [bar(g)] | TC* | NA* | [°C] | **SF-M-S** | **SF-MV-S** |
| 1“ | 0,500 | 7 | 14** | 260 | 314** | 201** |
| 1½“ | 0,320 | 7 | 14** | 260 | 804** | 615** |
| 2“ | 0,250 | 7 | 14** | 260 | 1.590** | 1.320** |
| 2½“ | 0,200 | 6 | 12** | 260 | 2.642** | 2.290** |
| 3“ | 0,160 | 6 | 12** | 260 | 3.848** | 3.421** |
| 4“ | 0,125 | 6 | 10** | 260 | 7.088** | 6.503** |

* TC = Tri-Clamp-connection / NA = NA-Connect-connection

** approximate values




## SU-R-S

### THE RUPTURE DISC FOR HIGH HYGIENE REQUIREMENTS

MEDIUM

WORKING PRESSURE

FRAGMENTATION

ALERTING

EXTRA

The aseptic rupture discs of the series SU-R-S are concave domed pressure relief devices, developed for being used in case of particularly high hygiene requirements. They can be used in TriClamp connections or in NA-Connect connections. Processes with gases are protected reliably by the SU-R-S. Due to its non-fragmenting bursting, this rupture disc is particularly suitable for being used in front of a safety relief valve. In this connection, its back pressure loading capacity ensures that a downstream safety valve can be maintained when being installed.

Due to the smooth surface of the bursting membrane with a surface roughness of up to Ra=0,45 µm and with the dead-space-poor design of the SU-R-S, all requirements for hygienic design are met. Consequently, the SU-R-S is particularly suitable for aseptic and sterile applications. Carefully selected sealing materials meet the highest requirements on tightness in your process. Materials, selected for the specific application, allow the use even with corrosive media as well as media that tend to caking. With an operating ratio of 90 %, the rupture discs of the series SU-R-S protect your system reliably, even under permanently high load.

## OVERVIEW OF YOUR ADVANTAGES:

- → can be installed in Tri-Clamp and NA-Connect connections
- → suitable for aseptic and sanitary applications
- → recommended for being used in front of a safety relief valve
- → non-fragmenting response
- → medium to high pressures
- → available in special materials, such as Hastelloy® or Inconel®
- → GYLON BIO-PRO® seals[1] as well as seals in PTFE pure white[1] or EPDM[1] meet highest requirements on tightness
- → ideal for media that tends to caking
- → ideal in case of pulsating operating pressures
- → vacuum-sealed and back pressure-resistant (at least 140 % of the burst pressure)[2]
- → use at temperatures up to 260 °C possible[2]
- → operating ratio: 90 %

## STRIKO - STANDARD

3D-nameplate and grounding lug for a potential equalisation of the rupture disc!



[1] Conform to FDA and USP Class VI and free of animal ingredients (ADI).

[2] Depending on the respective application.

| technical data of SU-R-S series | | | column A acc. to DIN 32676 | | |
|---|---|---|---|---|---|
| Nominal diameter | min. burst pressure | max. burst pressure [bar(g)] | | max. temperature | flow cross-section |
| DN | [bar(g)] | TC* | NA* | [°C] | [mm²] |
| 25 | 5,5 | 7 | 14** | 260 | 254 |
| 32 | 4,5** | 7 | 14** | 260 | 530 |
| 40 | 3 | 7 | 14** | 260 | 530 |
| 50 | 3,5 | 7 | 14** | 260 | 895 |
| 65 | 2 | 6 | 12** | 260 | 1.594 |
| 80 | 1 | 6 | 12** | 260 | 1.594 |
| 100 | 1 | 6 | 12** | 260 | 3.056 |

| technical data of SU-R-S series | | | column B acc. to DIN 32676 | | |
|---|---|---|---|---|---|
| Nominal diameter | min. burst pressure | max. burst pressure [bar(g)] | | max. temperature | flow cross-section |
| DN/OD | [bar(g)] | TC* | NA* | [°C] | [mm²] |
| 26,9 | 5,5 | 7 | 14** | 260 | 254 |
| 33,7 | 4,5** | 7 | 14** | 260 | 530 |
| 42,4 | 3 | 7 | 14** | 260 | 530 |
| 48,3 | 3,5 | 7 | 14** | 260 | 895 |
| 60,3 | 2 | 6 | 12** | 260 | 1.594 |
| 76,1 | 1 | 6 | 12** | 260 | 1.594 |
| 88,9 | 1 | 6 | 12** | 260 | 3.056 |

| technical data of SU-R-S series | | | column C acc. to DIN 32676 | | |
|---|---|---|---|---|---|
| Nominal diameter | min. burst pressure | max. burst pressure [bar(g)] | | max. temperature | flow cross-section |
| Inch | [bar(g)] | TC* | NA* | [°C] | [mm²] |
| 1½“ | 3,5 | 7 | 14** | 260 | 254 |
| 2“ | 3,5 | 7 | 14** | 260 | 530 |
| 2½“ | 2 | 7 | 14** | 260 | 1.594 |
| 3“ | 1 | 6 | 12** | 260 | 1.594 |
| 4“ | 1 | 6 | 12** | 260 | 3.056 |

* TC = Tri-Clamp-connection / NA = NA-Connect-connection

** approximate values





# S-BS / S-BM / S-BZ

## THE COMPACT DEVICES

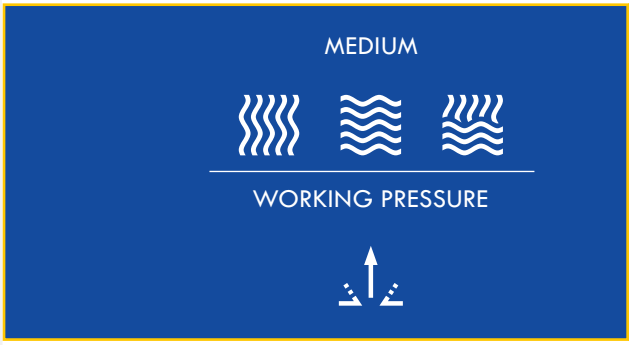
Burst safety components of the series S-BS, S-BM and S-BZ are compact rupture disc plugs being installed on almost every position of a housing, for example on drives or hydraulic systems (individually executable). So, a housing can be equipped subsequently with a pressure protection component. The rupture disc plugs with fixing thread are quick and easy to install and can be exchanged in case of response. The STRIKO rupture disc plugs S-BS, S-BM and S-BZ cover a wide range of burst pressures. Three different versions for the product outlet of the rupture disc plugs (free blowing-off, damped blowing-off or with threaded connection) ensure the greatest possible control when discharging the medium.

The S-BM and the S-BZ are multipart rupture disc plugs, in whose housing a composite rupture disc (S-BM) or a full metal rupture disc (S-BZ) is installed. With the S-BM can be obtained low burst pressures from 1 bar[1]. The S-BZ is characterized by a metallic seal in the housing obtaining so highest tightness requirements. It is used for medium to high pressure protecting applications.

The S-BS is characterized by a technically absolute tightness and meets, with minimum leakage rate, the highest possible requirements on tightness. The same has been designed with small dead space and is used in case of applications with high to very high pressures.

## OVERVIEW OF YOUR ADVANTAGES:

- → low leak rate – meets highest requirements on tightness
- → application-specific and customer-specific design
- → suitable for versatile use, for example in hydraulic systems
- → easy and quick installation or exchange
- → available in special materials, such as Hastelloy® or Inconel®
- → standard threads: 1“, ¾“, ½“, ¼“ – further threads on inquiry
- → pressure range: from 1 bar to approx 800 bar[1]
- → use at temperatures up to 480 °C is possible[1]
- → operating ratio: up to 80 %[1]




[1] Depending on the respective application.





# S-EB / S-EB-SVT

## THE EXTRUDER RUPTURE DISC



The S-EB and the S-EB-SVT were specially developed for the pressure protection of extruders. They are ideal as sole pressure protection or as supplement for active safety elements such as pressure transducers and temperature sensors. Carefully selected materials allow the use of extruder rupture discs in case of high temperatures and pressures. Individually designed to your application, the extruder rupture discs S-EB and S-EB-SVT protect your extruders reliably against overpressure within a pressure range from around 180 bar to 800 bar. Designed with minimal dead space, the extruder rupture discs meet the highest possible requirements on tightness with minimum leakage rate. The S-EB-SVT incorporates a rupture indicator system that signals the response of the rupture disc reliably.

WORKING PRESSURE



ALERTING



## OVERVIEW OF YOUR ADVANTAGES:

- → can be used as only pressure protection or as supplement for active safety elements
- → low leaking rate – meets highest requirements on tightness
- → quick and easy installation or exchange
- → available in special materials, such as Hastelloy® or Inconel®
- → standard thread: ½“-20 UNF – further thread on inquiry
- → three standard lengths are available – further lengths on inquiry
- → integrated rupture indicator (S-EB-SVT)
- → pressure range: from 180 bar to approx. 800 bar[1]
- → use at temperatures up to 480 °C possible[1]
- → operating ratio: 80 %

[1] Depending on the respective application.




# G2

## THE FLAT GRAPHITE RUPTURE DISC

The rupture discs of the series G2 are flat graphite rupture discs for low to medium burst pressures. Graphite rupture discs are distinguished by their excellent corrosion resistance being therefore suitable for a variety of applications.

The rupture discs of the series G2 are installed into holders of type HG2. If being necessary, they can also be combined with vacuum supports, so that the rupture discs can be used in processes with full vacuum, even if they respond in overpressure direction already at pressures of less than 1,6 bar.

In order to protect reliably your processes, the G2 series is available either with a product-side PTFE protection foil (GL2) or with a product-side sintered PFA coating (GT2).

MEDIUM

INSTALLATION

WORKING PRESSURE

FRAGEMENTATION

ALERTING

## OVERVIEW OF YOUR ADVANTAGES:

- → meets highest requirements on tightness in the STRIKO holder HG2
- → can be combined with vacuum support (optional)
- → can be combined with STRIKO rupture indicator (optional)
- → product-side PTFE protection foil (GL2) or sintered PFA coating (GT2) is possible
- → pressure range: from 0,07 bar to 28 bar
- → use at temperatures up to 250 °C possible[1]
- → operating ratio: 80 %
- → nominal diameters: DN 25 to DN 400



[1] Depending on the respective application.



MEDIUM

INSTALLATION

WORKING PRESSURE

FRAGEMENTATION

ALERTING

# G3

## THE MONOBLOCK GRAPHITE RUPTURE DISC

The graphite rupture discs of the series G3 are monoblock rupture discs. They are installed directly between flanges, a special holder is not necessary. The advantages of the graphite rupture discs consist of their high corrosion resistance and the good price/performance ratio, as well as the easy installation.

The monoblock graphite rupture discs are subdivided into two groups: On the one hand the classic series G3M and G3MV (vacuum support), made completely of graphite, on the other hand the series G3A and G3AV (reinforcement, vacuum support), provided with a steel/stainless steel reinforcement. The reinforcing ring supports increased axial forces during assembly which may occur due to inclined position or misalignment of the flanges.

For securing your processes reliably, the G3 series is available either with a product-side PTFE protection foil (GL3 ...) or with a product-side sintered PFA coating (GT3 ...) .



## OVERVIEW OF YOUR ADVANTAGES:

- → easy installation directly between flange connections without holder
- → possible with integrated vacuum support (G3MV / G3AV)
- → can be combined with STRIKO rupture indicator (optional)
- → product-side PTFE protection foil (GL3...) or sintered PFA coating (GT3...) possible
- → pressure range: from 0,07 bar to 28 bar
- → use at temperatures up to 250 °C possible[1]
- → operating ratio: 80 %
- → nominal diameters: DN 25 to DN 400



[1] Depending on the respective application.



# STRIKO RUPTURE DISC HOLDERS

Depending on the type, STRIKO rupture discs can be installed directly between excisting customer's flanges or in rupture disc holders. Composite rupture discs of the series SF-M and SZ-M can be installed directly between flanges. Domed rupture discs must be installed in holders to ensure a correct installation and function. Therefore STRIKO offers its standard (SHF / SHZ / SHU) and pre-torqued holders (SHF Pro / SHZ Pro / SHU Pro). Furthermore STRIKO offers special-purpose solutions for rupture discs with very small nominal diameters and high pressures. Rupture discs made of graphite can also be installed directly between flanges (series G3) or in holders (series G2 with holder HG2).

By inserting rupture discs into holders, ensures their correct function. STRIKO holders are especially designed for each kind of rupture disc to provide a well fitting accuracy. While the flange connections are screwed, the rupture disc holders absorb occuring axial forces and tension differences, that are caused by unevennesses on the flange's sealing faces. By doing so, the holders protect the rupture discs from damage during installation before startup. Optimised sealing faces make for the rupture disc's best tightness at its site of operation.

STRIKO holders usually are made of stainless steel like 1.4571 or special materials like Hastelloy® or Inconel®. Holders for graphite rupture discs are made of graphite, stainless steel, PTFE, other special materials or PTFE-lining.



## OVERVIEW OF YOUR ADVANTAGES:

- → optimised sealing faces for best tightness
- → simple assembling and disassembling
- → protection of the rupture disc from damages
- → compensation of tension differences at installation
- → marking of the flow direction for correct installation
- → combinable with all STRIKO burst and alerting systems
- → also available in special materials as Hastelloy®, Inconel® or with PTFE-lining
- → available in all rupture discs nominal diameters




# SHF / SHZ / SHU

## THE STANDARD HOLDERS

The STRIKO rupture disc holders SHF, SHZ and SHU are suitable for the installation of STRIKO rupture discs in flange connections. The rupture disc holders with optimized sealing surfaces ensure a best possible position and tightness of the rupture disc. The STRIKO holders support axial forces when screwing on the flange connections and thus they compensate optimally stress differences caused by unevenness on the flange sealing surfaces. So, the rupture disc holders protect installed rupture discs against damages already before start-up. The created space, existing due to the higher installation height, facilitates furthermore an easier removal of the rupture disc after bursting. The STRIKO holders are suitable for being used with all STRIKO rupture indicating/alerting systems. Rupture discs installed in the STRIKO holder have a larger flow cross-section than rupture discs installed directly between flanges.

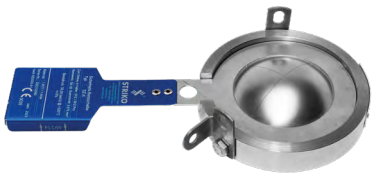
STRIKO rupture disc holder SHF is suitable for installation of the flat rupture disc series SF-M, SF-MD, SF-MV as well as for the installation of the permanent vacuum supports and overpressure supports PVS and PÜS. Even sealing surfaces ensure a secure fit of the rupture discs.

STRIKO rupture disc holder SHZ is suitable for installation of the forward-acting rupture disc series SZ-M, SZ-MV and the SZ-X. A metallic seal ensures the absolute tightness of the installed SZ-X. In dependence on the specified burst pressure of the SZ-M and SZ-MV, a metallic seal or a flat sealing seat ensures optimal tightness of the rupture discs.

STRIKO rupture disc holder SHU is suitable for installation of the reverse-acting rupture discs SU-C and SU-R. A metallic sealing ensures an absolute tightness of the installed rupture discs.

## OVERVIEW OF YOUR ADVANTAGES:

- → metallic sealing ensures absolute tightness (types SHZ[1] and SHU)
- → locking butt strap for simple and safe installation
- → protection of the rupture disc against damaging
- → easy installation and removal of the rupture disc
- → compensation of stress differences during installation
- → marking of the flow direction ensures a reliable installation
- → combinable with all STRIKO burts indicator systems
- → available in special materials, such as Hastelloy®, Inconel® or with PTFE-liner
- → available in all rupture disc nominal diameters





[1] Depending on the respective application.




# SHF PRO / SHZ PRO / SHU PRO

## THE PRE-TORQUED HOLDERS

The STRIKO pre-torqued holders SHF Pro, SHZ Pro and SHU Pro are suitable for the installation of STRIKO rupture discs in flange connections. By high-strength preloading screws, the rupture disc is pre-assembled in the holder with the required tightening torque. Thus, the composite of holder and rupture disc can be handled much easier, being consequently a temporal and ergonomic advantage, in particular in case of unfavorable installation sites. The existing pilot holes on the pre-torqued holder facilitate the installation between two flanges additionally. Both bolts and screws can be „pushed through“ for fixing the holder. That results in the exact installing position of the holder. When the system is at stand-still, it is always possible to loosen the flange connection for carrying out a visual inspection, for executing cleaning work in case of deposits on the rupture disc or for replacing the flange gaskets. In this connection, the rupture disc remains installed in the pre-loaded holder and can be re-used when having executed the necessary maintenance work. So is ensured a perfect function of the rupture disc and its optimal bursting behavior.

STRIKO rupture disc holder SHF Pro is suitable for installation of the flat rupture disc series SF-M, SF-MD, SF-MV as well as for the installation of the permanent vacuum supports and overpressure supports PVS and PÜS. Even sealing surfaces ensure a secure fit of the rupture discs.

STRIKO rupture disc holder SHZ Pro is suitable for installation of the forward-acting rupture disc series SZ-M, SZ-MV and the SZ-X. A metallic seal ensures the absolute tightness of the installed SZ-X. In dependence on the specified burst pressure of the SZ-M and SZ-MV, a metallic seal or a flat sealing seat ensures optimal tightness of the rupture discs.

STRIKO rupture disc holder SHU Pro is suitable for installation of the reverse-acting rupture discs SU-C and SU-R. A metallic sealing ensures an absolute tightness of the installed rupture discs.

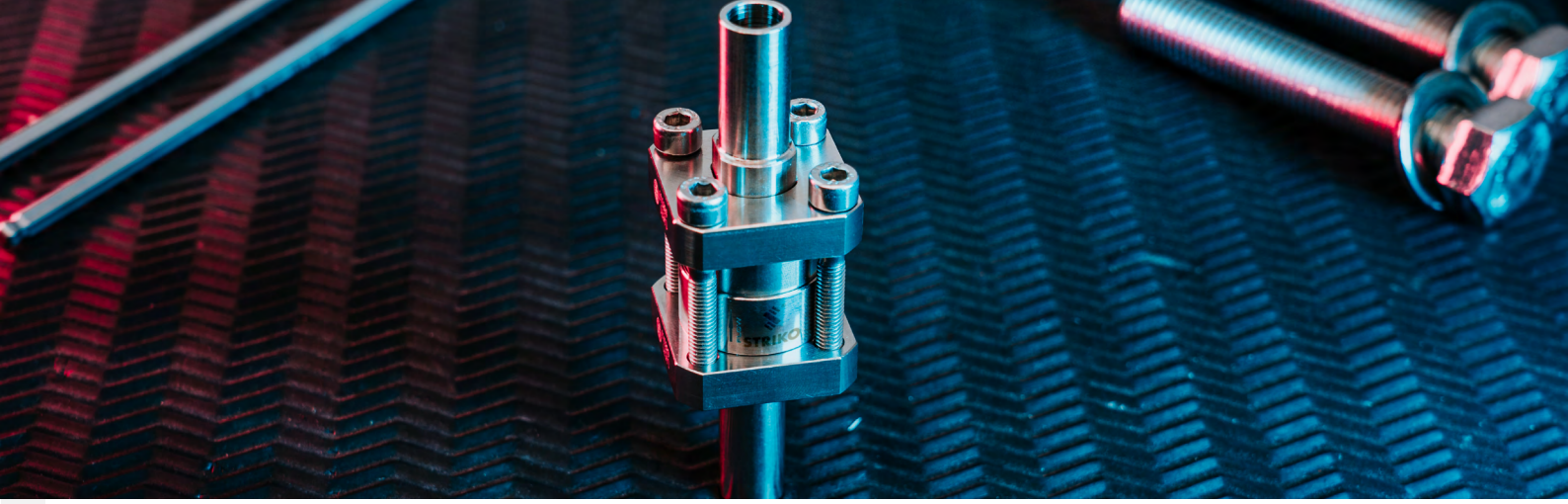




## OVERVIEW OF YOUR ADVANTAGES:

- → pre-assembly of the rupture disc in the holder ensures reliable tightness
- → metallic sealing ensures absolute tightness (SHZ Pro[1] and SHU Pro)
- → check of the rupture disc without subsequent exchange
- → protection of the rupture disc against damages
- → easy installation and removal of the rupture disc
- → compensation of stress differences during assembly
- → marking of the flow direction ensures reliable installation
- → can be combined with all STRIKO rupture indicating systems
- → available in special materials, such as Hastelloy® or Inconel®
- → Nominal diametern: DN 20 to DN 400[1]

[1] Depending on the respective application.





# SH LAB

## THE LABORATORY HOLDER

The STRIKO holder SH-Lab has been developed for being applied in laboratories or technical facilities. Alternatively, the same can be used in case of respectively suitable applications. With connections to the twin ferrule fitting, the SH-Lab is individually adaptable. Because of its compact and robust design, the same can be adjusted to versatile assembly situations. The connections can be carried out in an application- and customer-specific way. The torsion-free installation of the rupture disc ensures a reliable functionality. With optimized sealing surfaces, the highest possible requirements on tightness are fulfilled.



## OVERVIEW OF YOUR ADVANTAGES:

- → optimized sealing surfaces for optimum tightness
- → pre-assembly of the rupture disc in the holder ensures reliable tightness
- → metallic sealing ensures absolute tightness
- → connections are individually adaptable
- → torsion-free installation of the rupture disc
- → marking of the flow direction ensures reliable installation
- → available in special materials, such as Hastelloy® or Inconel®
- → can be used at temperatures up to 330 °C[1]
- → low to high pressures are possible (2 bar to 800 bar)
- → rupture disc nominal diameters: ½“ and ¾“



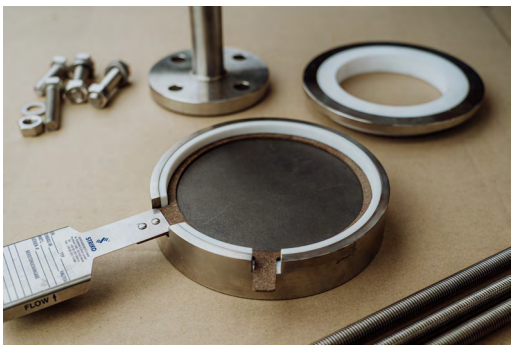

[1] Depending on the respective application.




# HG2

THE HOLDER FOR GRAPHITE RUPTURE DISCS

The holder G2 is used for the installation of flat graphite rupture discs of the series G2. The optional vacuum support for graphite rupture discs is integrated into the holder and protects the graphite rupture disc against bursting in the vacuum direction with full vacuum. The HG2 is available in the graphite, stainless steel, PTFE or in special materials, such as Hastelloy® or Inconel®. The PTFE-liner completes the versatility of the HG2.





## OVERVIEW OF YOUR ADVANTAGES:

- → optimized sealing surfaces for optimum tightness
- → optional vacuum support
- → marking of the flow direction ensures reliable assembly
- → available in special materials, such as Hastelloy®, Inconel® or with PTFE-liner
- → nominal diameters: DN 25 to DN 400


ALARMGEBER
SVT
02
ALARMGEBER

# STRIKO - BURST INDICATORS

## NOTE TO ATEX

According to decision E5197 / 15 of DEKRA EXAM GmbH (notified body No. 0158 according to article 9 of the Directive 94/9/EC of the European Parliament and of the Council of 23 March 1994 and Certification Body (ExCB) and test laboratory (ExTL) in the IECEx Scheme), the burst indicator constitutes, in sense of the type of protection intrinsic safety „i“, a so-called „simple electrical equipment“ and will be handled in detail in section 5.7 of EN 60079-11: 2012. All burst indicators from STRIKO meet these requirements.

## FUNCTION

Due to response of the burst indicator, there are interrupted the closed circuit and consequently the open-circuit signal, triggering an audible or optical alarm or initiating other MSR measures, for example in the control room. When the rupture disc has responded or the safety relief valve has opened, the burst indicator and the burst disc are exchanged and the system is ready to operate again.

## INSTALLATION

STRIKO burst indicators and leakage sensors are installed on the outlet side of the rupture disc between holder outlet part and flange. They can also be used for monitoring safety valves on their outlet side. Furthermore, they can be combined with rupture discs from other manufacturers as they are independent components.

### OVERVIEW OF YOUR ADVANTAGES:

- → STRIKO burst indicators are independent components which can be used without a rupture disc or with a safety relieve valve
- → can be combined with graphite and metal rupture discs of all manufacturers
- → also usable with flat rupture discs installed between flanges; subsequent installation is possible
- → easy installation; maintenance-free
- → quick detection of a fault
- → high chemical and temperature resistance
- → ready for installation with gasket and connection cable
- → nominal diameters: DN 25 to DN 600




# SVT 02

## THE STANDARD BURST INDICATORTOR

Burst indicators are simple and effective auxiliary means for indicating the response of a rupture disc or the opening of a safety relief valve. When being combined with a bursting disc, they are installed on the outlet side in front of the customer flange or at the outlet flange of a safety relief valve, instead of the normally used seal. The SVT 02 is also available as SVT 02-S for hygiene applications.

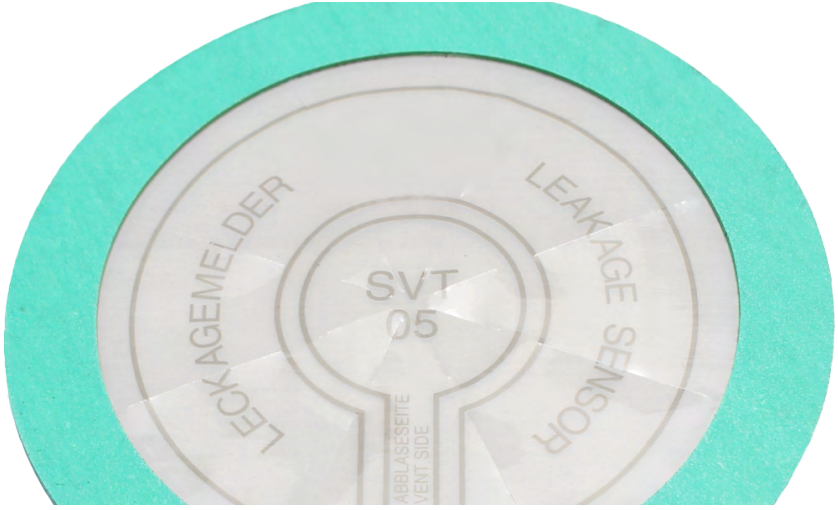
The cost-effective standard burst indicator SVT 02 is recommended for all applications in the temperature range from -30 °C to +220 °C in non-aggressive environment. The delivery is completely ready-to-install with seals (Klingersil C-4400, graphite, PTFE, others on request) and PTFE-sheathed connecting cable, suitable for DIN, ANSI and JIS flanges.

In case of the burst indicator SVT 02, for the volume compensation being necessary by thermal expansion, the PEEK mebrane is slotted between rupture disc and burst indicator or valve seat and outlet flange. So, the generation of a false signal caused through the damaged printed conductor path of silver will be avoided and a long service life will be achieved.



## OVERVIEW OF YOUR ADVANTAGES:

- → fast fault detection
- → for signalling the response of a rupture disc or the opening of a safety relief valve
- → can be combined with graphite and metal rupture discs, also with rupture discs of other manufacturers
- → slotted PEEK foil with printed conductor path of silver
- → subsequent installation is possible
- → available for hygiene applications (SVT 02-S)
- → temperature range: -30 °C to +220 °C
- → in standard sizes ready for installation from stock




# SVT 05

## THE LEAKAGE SENSOR

The leakage sensor SVT 05 is the useful development and indispensable amendment of the proved STRIKO burst indicator SVT 02. Due to the additional closed PTFE foil, attached to the product side, the SVT 05 detects even slightest leaks reliably. The PTFE foil bulges even in case of very slow pressure rise whereby the conductor path circuit on the slotted PEEK membrane will be destroyed and a respective signal is triggered. In this connection, the response pressure is only a little higher than in case of the burst indicator SVT 02 and the operating temperatures are also between -30 °C and +220°C. As SVT 05-S, the SVT 05 is also available for hygiene applications.

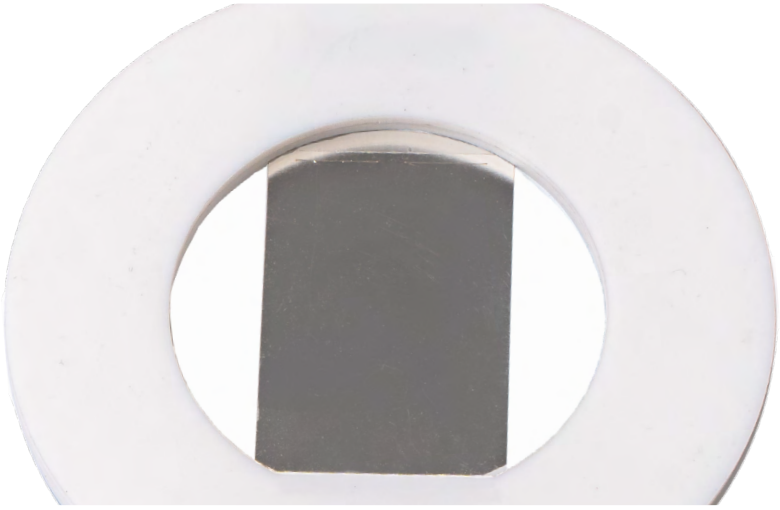
Conventional burst indicators signalize only in case of the complete response of the rupture disc. Due to their design with pre-slotted foil, they are also suitable for low pressures, but only with relatively quick pressure rise. A slow pressure rise, e.g. due to untighten safety relief valves, pitting corrosion or hair cracks in damaged rupture discs, can be compensated by the slotted foil of the standard burst indicator SVT 02 and does never result in signalization. In such cases, the leakage sensor SVT 05 is the right decision.

In particular, from an environmental point of view, the early detection of untighten rupture discs or the response of safety valves is important and possible with the SVT 05. The delivery is completely ready-to-install with seals and connecting cable.




## OVERVIEW OF YOUR ADVANTAGES:

- → quick detection of a fault
- → for detecting lowest leakages
- → for signalling the response of a burst disc or the opening of a safety relief valve
- → can be combined with graphite and metal rupture discs, also with rupture discs of other manufacturers
- → slotted PEEK foil with printed conductor path of silver and closed PTFE foil on product side
- → subsequent installation is possible
- → available for hygiene applications (SVT 05-S)
- → temperature range: -30 °C to +220 °C
- → in usual nominal diameters on stock-delivery ready for installation



# SVT AM

## THE FULL-METAL BURST INDICATOR

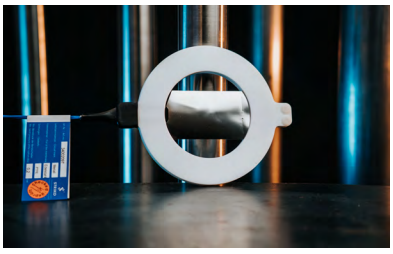
The full-metal burst indicator SVT AM is used in case of high temperatures and aggressive media. The metal membrane is made of high-grade metals, such as stainless steel, Hastelloy®, Tantalum, silver or other materials - in dependence on the application's requirements. Thus, a high chemical resistance is achieved and the burst indicator can be used in the temperature range of -30 °C to +370 °C. By lateral cutting free of the metal membrane, a faulty signalization of the SVT AM at back pressure is avoided1. The SVT AM is also available as SVT AM-S for hygiene applications.

Sealing materials such as Klingersil C-4400, PTFE or Garlock GYLON® are combined, according to requirement, with the respective material of the metal membrane and assembled with a PFTE-sheathed cable or a high-temperature cable - so the SVT AM is ready for any task.



## OVERVIEW OF YOUR ADVANTAGES:

- → quick detection of a fault
- → for signaling the response of a rupture disc or the opening of a safety relief valve
- → Can be combined with graphite and metal rupture discs, also with rupture discs of other manufacturers.
- → full-metal membrane
- → high chemical resistance
- → suitable for being used in case of back pressures[1]
- → subsequent installation is possible
- → available for hygiene applications (SVT AM-S)
- → temperature range: -30 °C to +370 °C[1]



[1] Depending on the respective application.




# SVT AM-L

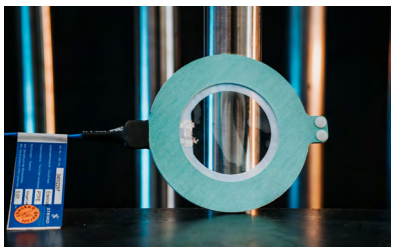
## THE LOW-PRESSURE BURST INDICATORTOR




For applications with very low response pressures will be used the burst indicator SVT AM-L. It indicates the response of a rupture disc or the opening of safety valve reliably, already from lowest differential pressure (10 mbar).

Typically, the SVT AM-L is used for monitoring and protecting large capacity storage tanks and vacuum reactors.

Due to the wide selection of sealing materials and the use of a PTFE membrane in combination with the stainless steel conductor segment, the SVT AM-L can also be used within a temperature range from -30 °C to +220 °C. So as all STRIKO burst indicators, it can also be installed, instead of the seal, in a flange connection, also in combination with safety relief valves and rupture discs from other manufacturers.



## OVERVIEW OF YOUR ADVANTAGES:

- → quick detection of a fault
- → for detecting minimum leakages
- → for signaling the response of a rupture disc or the opening of a safety relief valve
- → can be combined with graphite and metal rupture discs, also with rupture discs of other manufacturers
- → very low response pressure (from 10 mbar)
- → slotted PEEK foil with vacuum-metallized conductor path of silver and closed PTFE foil on product side
- → subsequent installation is possible
- → temperature range: -30 °C to +220 °C

# INDUCTIVE BURST INDICATOR

## THE INDUCTIVE PROXIMITY SWITCH

Inductive proximity switches can be used to monitor the response of bursting discs permanently and cost-effectively. For this purpose, in the rupture disc holder can be installed an inductive proximity switch being opened via a contact element attached to the bursting membrane of the rupture disc. In case of normal response of the rupture disc, the bursting membrane turns over, together with the contact element, so that the required vent area of the rupture disc is given free. The bursting of the rupture disc is detected simultaneously so that the necessary measures can be introduced.
By replacing the rupture disc, the original state is restored - the signal flag installed on the brand-new rupture disc is once again in front of the proximity switch and keeps it closed until the next response of the rupture disc device. In case of this solution, only once will be invested in the rupture disc holder for holding the inductive proximity switch as well as in the proximity switch itself. Subsequently are arising only usual costs concerning the replacement of the rupture disc after bursting. Thus, the cost for spare parts and assembly are reducing permanently. But in case of the conventional solution with rupture disc and subsequently added separate burst indicators of the series SVT, the burst indicator is also to be replaced in addition to the rupture disc itself.

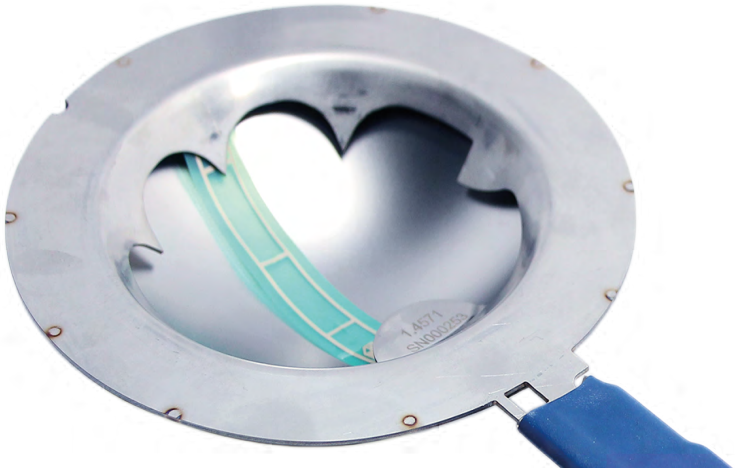
## TECHNICAL SPECIFICATIONS:

- → switching element function NAMUR normally closed contact
- → nominal voltage U0 8,2 V
- → protected against polarity reversal and short-circuit-proof
- → circuit state indication all around LED light, yellow
- → ambient temperature: -25 °C to +100 °C
- → connecting cable: 2 m PVC-sheathed
- → housing material: stainless steel 1.4305 / AISI 303 (V2A)
- → protection class: IP67
- → NAMUR EN 60947-5-6:2000 / IEC 60947-5-6:1999
- → electromagnetic compatibility acc. to NE 21:2007
- → standards: EN 60947-5-2:2007 / IEC 60947-5-2:2007
- → ATEX certification 1G; 2G; 3D; 3G

## OVERVIEW OF YOUR ADVANTAGES:

- → quick detection of a fault
- → for signaling the response of a rupture disc
- → permanently cost-effective solution of the rupture indication
- → can be used in STRIKO rupture disc holders SHF and SHU (also Pro version)
- → subsequent installation possible
- → easy assembly
- → release for use in potentially explosive atmospheres (ATEX)
- → maintenance-free
- → temperature range: -25 °C to +100 °C





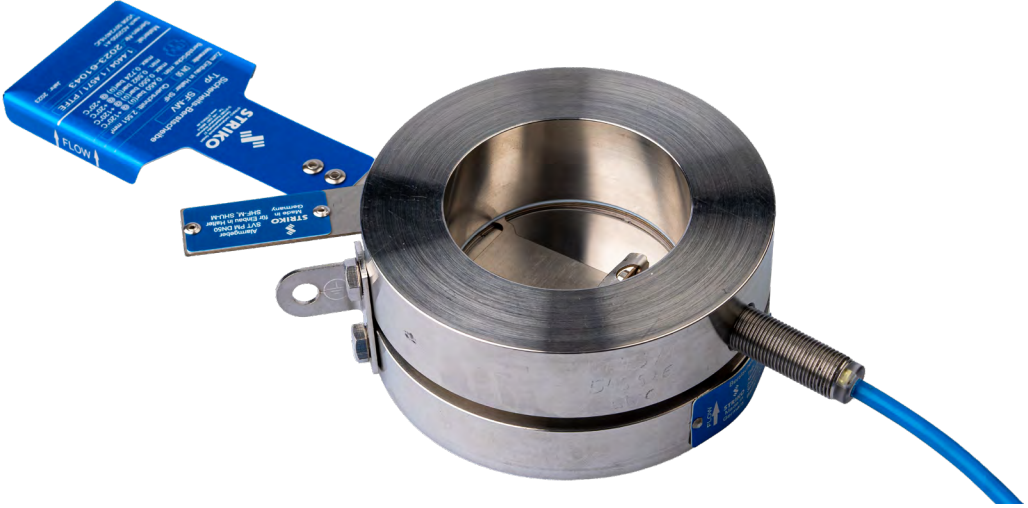
# INTEGRATED BURST INDICATOR

## THE INTEGRATED ALARMING SYSTEM

In case of this variant of burst indication, the closed-circuit current-carrying conductor path has been integrated directly in the rupture disc unit. That is the solution of burst safety and burst indication in only one component. By the response of the rupture disc, the conductor path of silver will be interrupted and thus the signal will be triggered. This version can be realized for all metal rupture discs.

### OVERVIEW OF YOUR ADVANTAGES:

- → quick detection of a fault
- → for signalling the response of the rupture disc
- → „two-in-one“ solution
- → PEEK strip with printed conductor path of silver
- → temperature range: -30 °C to +220 °C
- → almost independent on nominal diameter



# SVT PM / SVT PM-Z

## THE MAGNETIC BURST INDICATION FOR MAXIMUM FLEXIBILITY

The STRIKO burst indicator SVT PM / SVT PM-Z can be combined as an independent component with almost all STRIKO rupture discs. For that, the SVT PM is installed on the outlet side, directly behind the rupture disc, in the STRIKO holders SHF-M, SHZ-M, SHU-M (also Pro version).

The independence of the burst indicator SVT PM on the rupture disc to an independent component ensures a hither unprecedented flexibility concerning its application. The SVT PM can be easily retrofitted, replaced and, if necessary, submitted to a visual inspection. The exchange after response of the rupture disc does not require a rewiring of electric lines. In case of installation in front of a safety relief valve, it is not necessary to remove the SVT PM for executing the functional test of the safety relief valve because the same is back pressure-independent. Corrosion-resistant materials allow the use even in case of aggressive media. Because of the tapped blind hole for the magnetic field sensor, slightly volatile or highly toxic media cannot escape through trough-holes or porous gaskets - even if the combined rupture disc responds. That ensures the safety of personnel, environment and systems and protects moreover your budget.

## OVERVIEW OF YOUR ADVANTAGES:

- → quick detection of a fault
- → for signaling the response of a rupture disc
- → permanently cost-effective solution of the rupture indication
- → can be used in almost all STRIKO rupture disc holders
- → subsequent installation is possible
- → easy assembly
- → release for use in potentially explosive atmospheres (ATEX)
- → temperature range permanent magnet: -50 °C to +350 °C
- → temperature range magnetic field sensor: -25 °C to +70 °C









## TECHNICAL SPECIFICATION:

- → switching element function NAMUR normally open contact (NO)
- → nominal voltage U0 8,2 V
- → protected against polarity reversal and short-circuit-proof
- → circuit state indication rotating LED light, yellow
- → ambient temperature: -25 °C to +70 °C
- → connecting cable: 2 m PVC-sheathed
- → housing material: stainless steel 1.4404 / AISI 316L (V4A)
- → protection class: IP66 / IP67
- → NAMUR EN 60947-5-6:2000 / IEC 60947-5-2:2007
- → ATEX certification 2G

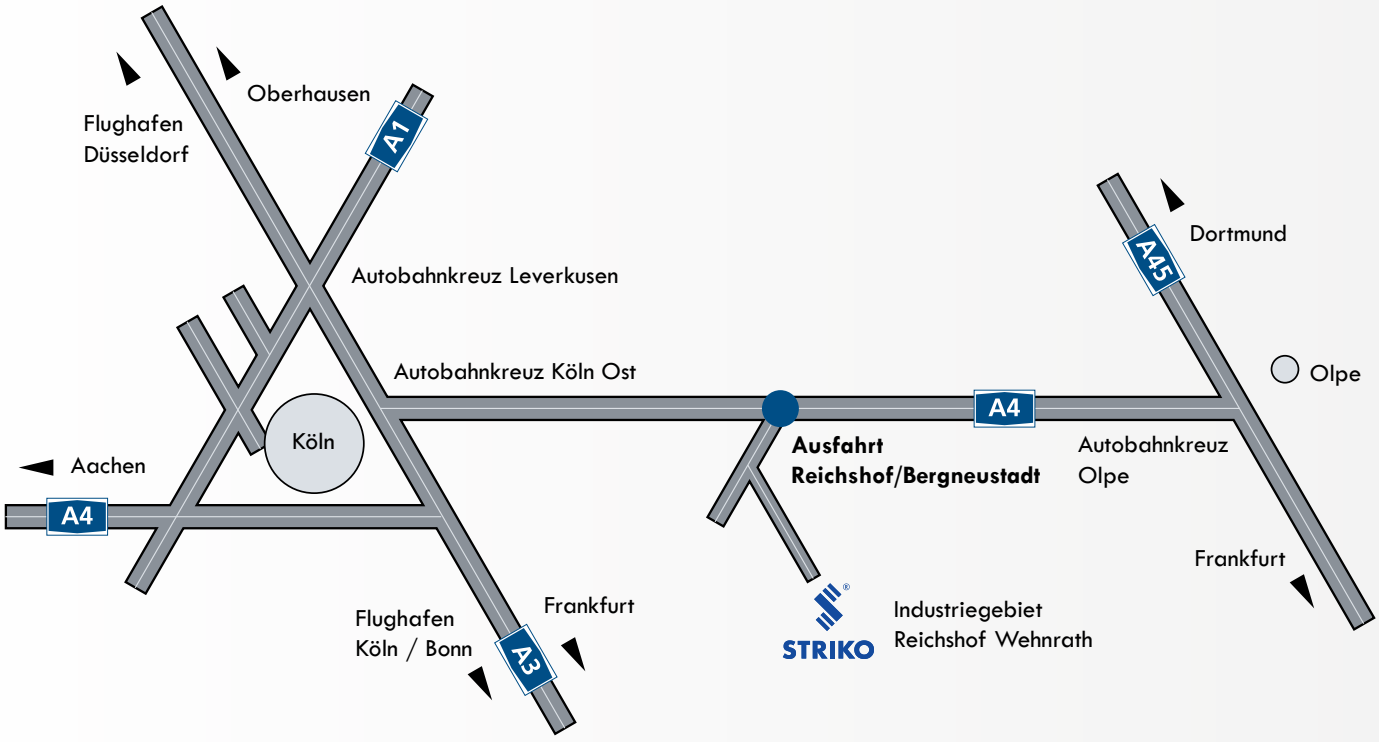
# How you can reach us


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## where you find us





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You are safe with **STRIKO.**

January 2024