

PRUSS[®]

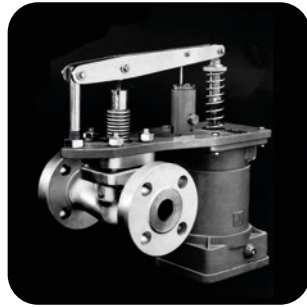
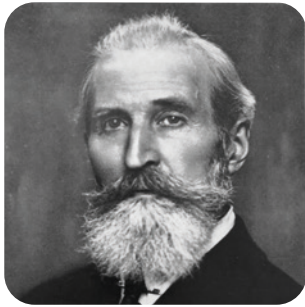
UNDER PRESSURE SINCE 1889.

STEAM TEST DEVICE

 MADE IN GERMANY



The story of our valves



**IT'S BEEN A LONG WAY TO HI-TECH INDUSTRIAL VALVES.
BUT SOME THINGS HAVE NEVER CHANGED.**

From the early inventions and products back in 1889 to over 10.000 worldwide projects nowadays, there are four simple things we're always keeping in mind: flexibility, innovativeness, quality and trustworthiness.



STEAM TEST DEVICE:

PRUSS steam test device are used to protect containers, boilers, and piping systems from excessive pressure.

Connected pressure reducing stations and/or shut-off valves can be precisely controlled to protect downstream systems with quick-closing actuators. Upstream systems are protected with quick-opening actuators.

The use of three individual pressure measurements in 1oo3 evaluation ensures that the safety function is guaranteed to be triggered if the set pressure is exceeded in just one line.

With an accuracy of $<1\%$ of the measuring range, the response accuracy is many times more precise than comparable spring-loaded safety valves.

The control system acts as a self-sufficient unit and functions independently of higher-level systems.

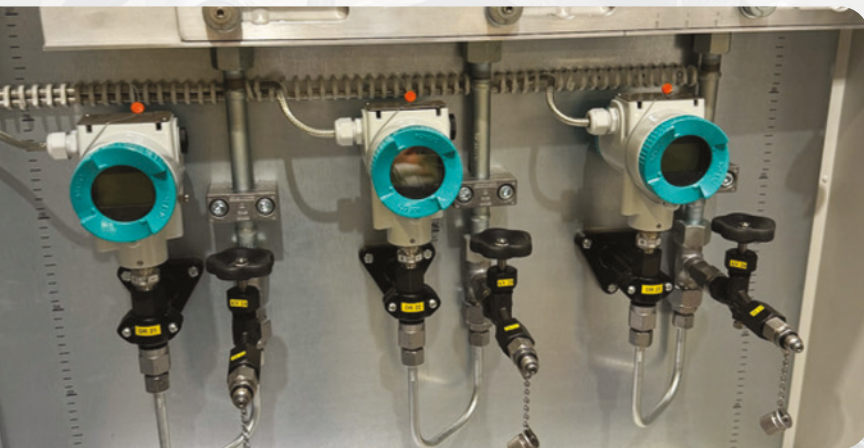
The functionality of the complete system can be checked during operation by shutting off only one line via an integrated locking rail in order to check it.

The remaining two lines are still available for safety purposes during this check. This means that this control system can be used in safety architectures up to SIL4. A corresponding assessment and the relevant type approval for use with pneumatic and hydraulic actuators are available.

When used with steam conversion stations, the control system can be supplemented with 2oo3 temperature protection for the downstream piping system.

SPECIFICATIONS:

- ▶ ND version <190 barg release pressure with ball valve and locking rail
- ▶ HD version >190 barg release pressure with manual shut-off valves with key lock
- ▶ Power supply 24 V DC, optional 230 or 400 V AC
- ▶ Optional redundant power supply, equipped with monitoring
- ▶ Installed in fully enclosed sheet steel cabinets for wall mounting, electrical cabinet IP 54, vertically swiveling doors, removable, double-bit lock



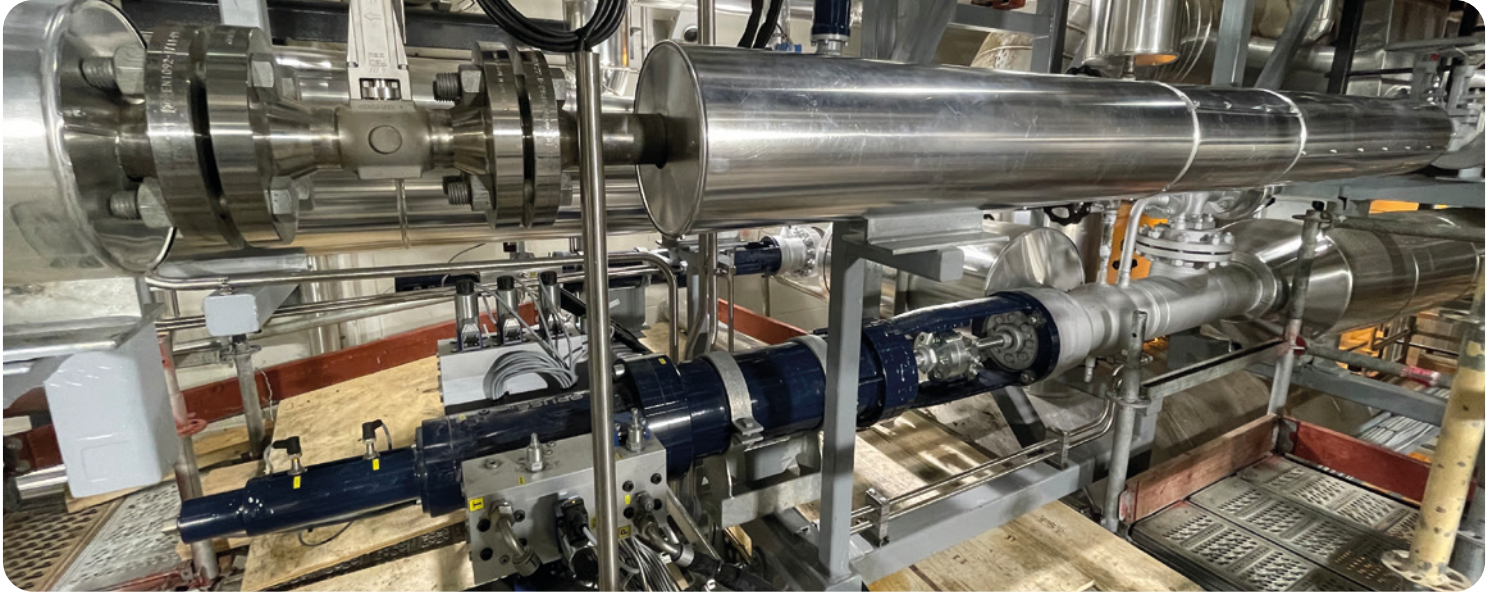
- ▶ Partial stroke test for functional testing during operation, release time adjustable for each channel
- ▶ Test circuit equipped with adjustable resistors for cable length correction



- 
- ▶ For securing the downstream or upstream pressure of components and piping systems in accordance with ISO 4126-1 / 4126-5 (TRD421)
 - ▶ Equipped with electronic pressure transducers with display and HART communication as well as smart digital evaluation units
 - ▶ Can be optionally combined with safety temperature shut off for 2 out of 3 temperature triggering
 - ▶ Tested and approved for use in SIL4 safety architectures
 - ▶ Signal exchange with the valve (setpoint/actual value) via terminal strip in the cabinet to enable recording
 - ▶ A locking rail allows only one pressure measuring line to be shut off for inspection during operation. The remaining two channels generally remain active for safety purposes
 - ▶ Remote release, optionally SIL compliant
 - ▶ Self-holding, optionally locally or remotely acknowledgeable
 - ▶ Analogue pressure and temperature signals can be provided galvanically isolated via isolating terminals for easy analysis and recording
 - ▶ For 1oo3 overpressure triggering of pneumatic or hydraulic actuators with triple safety device for up to 3 valves
 - ▶ Type approvals
 - Pneumatic: DPS-HB-00/1 TÜV.SV.24 – 1061
 - Hydraulic: DPS-HB-99/1 TÜV.SV.25 – 1037
 - ▶ Complies with the "Guidelines for component testing of safety devices against pressure exceedance, safety valves 100."

TECHNICAL DATA:

- Max. ambient temperature of the DPS: 0 ... +60 °C
- Max. temperature of the impulse lines: 0 ... +60 °C
- Max. ambient temperature of the electrical control system: Order-specific
- Paint finish: Gray white (RAL 7035), optional alternative colors available
- Protection class: IP 54



ADDITIONAL OPTIONS:

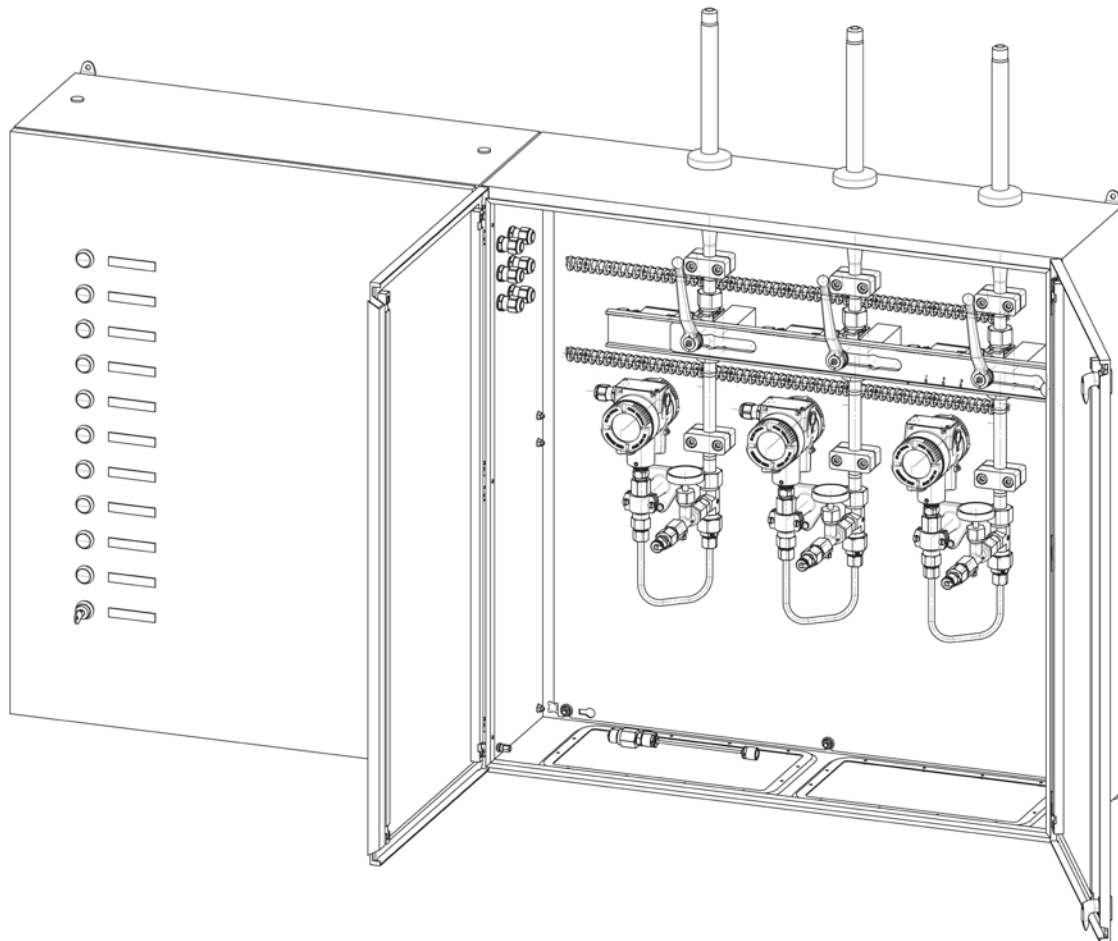
- Cabinet light combined with socket for electrical cabinet
- Cabinet light IP54 for mechanical cabinet
- Redundant power supply with monitoring, optionally 24V DC / 230V AC / 400V AC
- Remote triggering SIL compliant, single or redundant
- Loose adapters for connecting different pulse line dimensions
- Profile system for stand mounting
- 2003 temperatures triggering via smart units
- Self-holding with local and/or remote triggering
- Temperature transducers and/or weld-in sleeves according to project-specific requirements
- Control cabinet heating as condensation protection for the electrical control cabinet and/or control cabinet heating for mechanical control cabinets as frost protection
- At ambient temperatures >60°C, electrical cabinets can be equipped with air conditioning units
- Doors can be equipped with locking cylinders

INCLUDED ACCESSORIES:

- System description DE/EN
- High-pressure hose with Minimes coupling for spindle pump

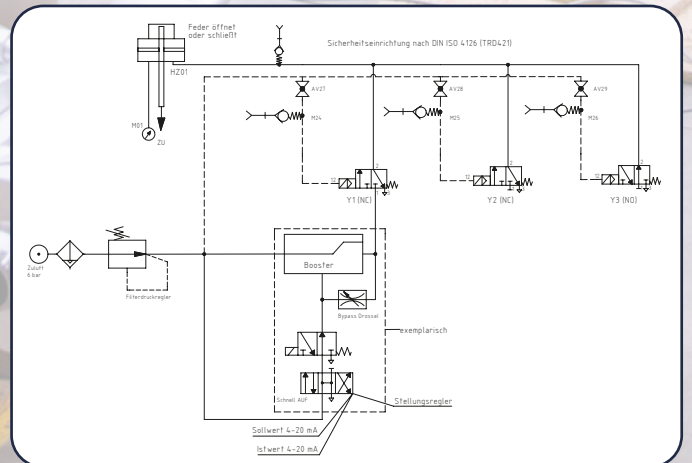
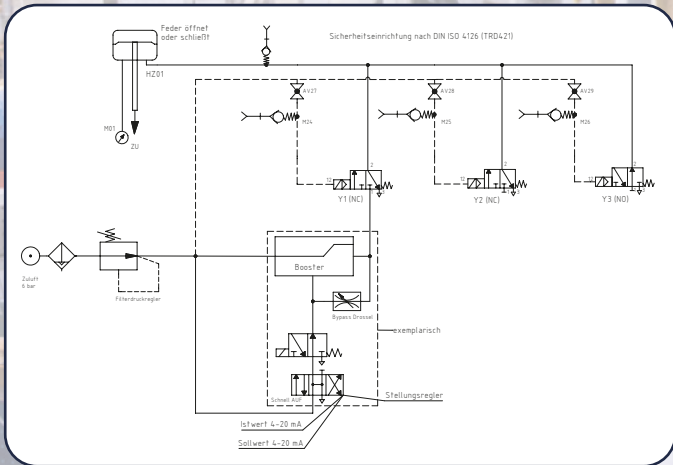
DIMENSIONS:

- 1764 x 1000 x 300 mm plus pulse lines
- The depth of the equipment cabinet differs for the HD version
- Mounting height relative to pressure switch displays preferably at eye level
- Optionally available with stand (top edge 1800 mm)



TRIPLE SAFETY DEVICE FOR PNEUMATIC ACTUATORS:

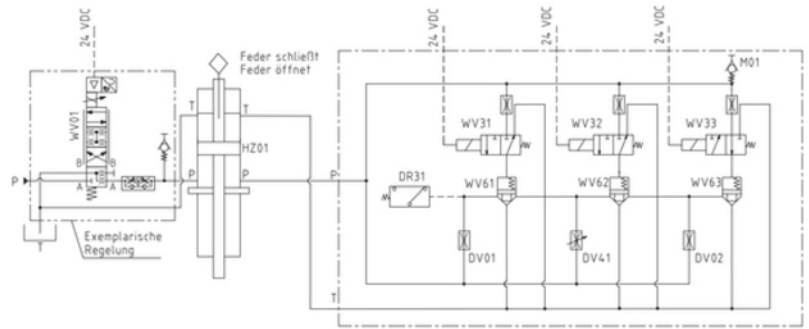
► Version with 3/2-way solenoid valves



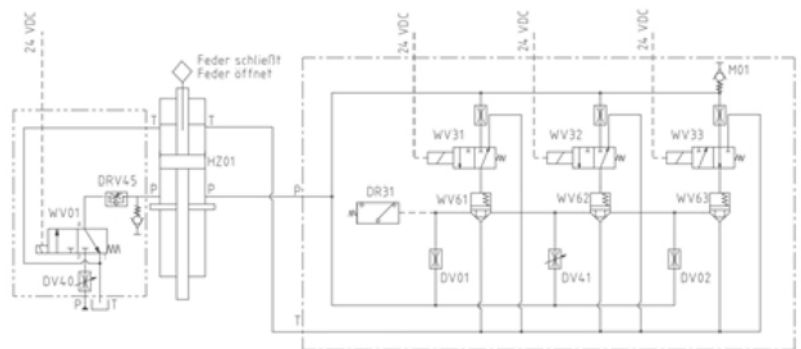




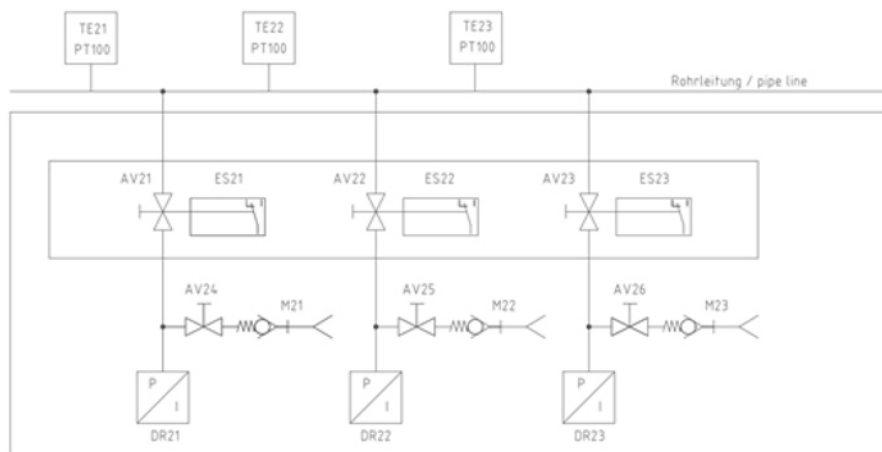
- Triple safety device for hydraulic control valves:



- Triple safety device for hydraulic shut-off valves:



STEAM TEST DEVICE FOR PNEUMATIC AND HYDRAULIC ACTUATORS:





Bescheinigung

Dem Hersteller wird aufgrund eines Prüfberichts zur Bauteilprüfung folgendes Bauteilkennzeichen zuerkannt:

Kategorie Bauteilkennzeichen:

[Sicherheitsventil](#)

Technische Überwachungs-
organisation und Prüfbericht:

TÜV NORD von 2024-06-14

Hersteller/Inverkehrbringer:

[Waldemar Pruss Armaturenfabrik GmbH](#)
[Schulenburg Landstraße 261](#)
[30419 Hannover](#)
[DEUTSCHLAND](#)

Bauteilkennzeichen:

[TÜV . SV . 24 - 1061](#)

Bauart:

elektro-pneumatische Sicherheitsventilsteuerung zur Steuerung von
pneumatisch betätigten Hauptventilen

Typ:

[DPS-HB-00/1](#)

Die Zuerkennung erfolgt in
Anwendung von:

- TÜV-Verband-Merkblatt Sicherheitsventil 100, Ausgabe 2022-12-14,
in Verbindung mit TÜV-Merkblatt Allgemeines 002, Ausgabe 2022-09-20
- wesentliche Sicherheitsanforderungen der Richtlinie 2014/68/EU
vom 15.05.2014 (Druckgeräterichtlinie)
- AD 2000-Merkblatt A 2, Ausgabe 2015-04
- DIN EN ISO 4126-1/A2, Sicherheitsventile, Ausgabe 2019-08
- DIN EN ISO 4126-5, Gesteuerte Sicherheitsventile (CSPRS),
Ausgabe 2016-12
- DIN EN ISO 4126-7, Allgemeine Daten, Ausgabe 2016-12
- DIN EN 50156-1, Abschnitt 10.5, Ausgabe 2016-03
- DIN EN 12952-10, Ausgabe 2022-02
- DIN EN 12953-8, Ausgabe 2002-04

Gültig bis:

[2029-06-30](#)

Die Zuerkennung kann widerrufen werden. Die bisherige Bescheinigung wird
hierdurch ersetzt.

Hinweis: Der Hersteller oder Importeur ist verpflichtet, den zuständigen Sachverständigen zu
beauftragen, Bauteile aus der laufenden Fertigung auf Übereinstimmung mit dem Baumuster einmal
jährlich stichprobenweise zu überprüfen.

TÜV-Verband e. V.
Friedrichstraße 136
10117 Berlin

Tel.: +49 30 760095-400
E-Mail: bauteile@tuev-verband.de

Ingo Blohm
2024.07.09 11:09:38
+02'00'

Fachbereich Industrie und Anlagentechnik

www.tuev-verband.de

HERE'S WHERE YOU CAN FIND US:



PRUSS®

UNDER PRESSURE SINCE 1889.

WALDEMAR PRUSS ARMATURENFABRIK GMBH • SCHULENBURGER LANDSTRASSE 261 • 30419 HANNOVER

TEL +49(0)511-27986-0 • INFO@PRUSS.DE • WWW.PRUSS.DE/EN/