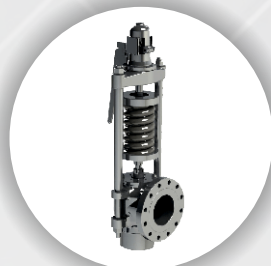


SAFETY RELIEF VALVES



Exclusive India Representative for

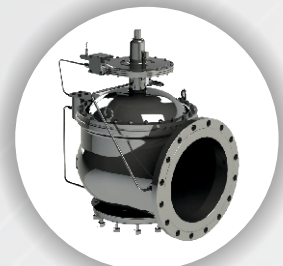
tai TAI Milano S.p.A.



High Pressure Steam Valve
ASME Sec I - Designed



Pilot Operated Valve



Low Pressure Pilot Operated Valve



SECURAMAX[®]

SECURAMAX is Safety Valves Division of Nirmal Industrial Controls Pvt. Ltd.

To meet the growing market demand of API & ASME stamped and certified safety relief valves requirement, Nirmal has created its new vertical for Safety Valves named as "SECURAMAX". At "SECURAMAX" we specifically designed Safety Relief Valve for overpressure protection of fired and unfired pressure vessels.

We have our state-of-art manufacturing facility situated at Asangaon, Maharashtra spread over 100000 sq ft shop floor area. SECURAMAX has its Head office located in Mumbai and Regional Representative office's spread all over India to support the customers need and provide timely services. Our product has been recognized as high quality among chemical, petrochemical, power, oil & gas, pharmaceutical sector.

Nirmal's SECURAMAX range of Safety Relief Valves builds on Nirmal's legacy of indigineous research & development of world class products.

We are the first Indian company to design & develop our own Safety Relief Valve which are type tested at National Board Laboratory USA & Certified to use ASME UV NB stamp. At our state-of-the-art manufacturing facility, we have got fully computerized test set-up. This test set-up tests the valve for set pressure, blow down pressure & leakage rate as per API-527, without any human intervention.

At SECURAMAX, we believe that our responsibilities are not just limited to delivering customized products. We are equally involved in each stage of the process from product planning and manufacturing to execution along with timely and regular follow-up sessions post-delivery.

With each product supply, SECURAMAX offers a formal 'Product Instruction & after Sales Commissioning Support', which includes value added features such as O & M manual, comprehensive literature & customer training program. A Technical Support Team is always available to answer any queries regarding our products & services. We also conduct various training programs for young engineers of the industry as we believe that with the right knowledge, the youth today can transform our tomorrow.





PRESSURE SAFETY VALVE - SR07 SERIES

TECHNICAL SPECIFICATIONS

- Valve Inlet Size: 1" (DN25) - 8" (DN200)
- Inlet Rating : 150# - 2500#
- Outlet Rating : 150# and 300#
- End Connection : Flanged (As per ASME B16.5)
- Orifice & Mounting Dimensions : As per API 526
- Maximum Set Pressure : 414 Bar

The effect of exceeding safe pressure level in an unprotected pressure vessel or system can cause catastrophic disaster for plant, personal and environment. Securamax SR-07 are spring loaded safety relief valves, specially designed and manufactured to API 526. These valves have been optimized in close cooperation with plant engineers and service specialists, simplifying design with fewer components for less down time, fewer spare parts and lower maintenance costs.

Securamax SR-07 has been engineered and designed for boilers, pressure vessels and other related system protection from overpressure, standard valve for non severe power application, suitable for low medium pressure, steam heating boilers, steam generators and oil & gas applications. All valves have been flow tested in accordance with Sec VIII code. Customized solutions & options can be applied by Nirmal / Securamax beyond the application range reported above.



PRESSURE RELIEF VALVE - SR08 SERIES

TECHNICAL SPECIFICATIONS

- Valve Size : ½" (DN15) - 1.5" (DN40)
- Pressure Rating : 150# to 2500#
- End connection : Flanged & Screwed
- Maximum set pressure : 420 Bar

The SR-08 are screwed safety relief valves, specially designed and manufactured to API 520/527. These valves have been optimized in close cooperation with plant engineers and service specialists, simplifying design with fewer components for less down time, fewer spare parts and lower maintenance costs.

Securamax SR-08 model are designed to automatically discharge gas, vapor, steam, liquid or dual phase mixture from a pressurized system, pressure vessels and pipelines. Great variety of type, materials and options to fit any applications as in Pharmaceuticals, Refineries, Chemical Industry, Fertilizer Plant, Petrochemical Industry, Oil & Gas Industry, Storage Tank Systems etc.



“Nirmal” is authorised exclusive representative in India for TAI Milano products i.e. Section-I relief valves, Pilot operated relief valve, etc... manufactured in Italy.

Tai Milano was founded in 1959. Since 1962 they have been manufacturing safety valves for industries in general and, in particular, for oil, gas, petrochemical, chemical and refining industries, power boilers and steam plants.

The manufacturing of both pilot and spring loaded safety valves takes place in the same workshop.

Tai Milano offices, of approximately 1000m² of floor space, are situated close to Central Station. Their factory, located in Guardamiglio near Piacenza, covers a total area of 13,000m² including a covered area of 7500m². It is modernly equipped and can handle a monthly production of 600 valves.

Quality is guaranteed by their Company's quality system, which is approved by Italcert in accordance with ISO 9001.

They also have ISO EN 14001 approval for Health and Environmental Concerns and OHSAS 18001 approval for Health & Safety Management System. Their valves are in accordance with Pressure Equipment Directive 97/23/EC and ATEX 94/9/EC Directive. Their Company is capable to supply spring loaded and pilot operated safety valves stamped with ASME UV stamp in accordance with ASME VIII Div. 1.

Tai Milano's main assets lie in a wealth of experience, the emphasis on research and experimental work, the importance given to quality as well as an accuracy system for deliveries.

Following results of tests and controls, their valves have been approved by RINA, LLOYD'S Register of Shipping, DNV, GOST, SELO People's Republic of China.



LOW & MEDIUM PRESSURE STEAM VALVE SERIES - 3000

TECHNICAL SPECIFICATIONS

- Inlet sizes: Up to 6"
- Orifice sizes: H to R1 inclusive
- Set pressure range: 1.5 to 80 bar g
- Max temperature: 543 °C
- Overpressure: 3%
- Blowdown: 4%
- Full nozzle design
- Adjustable blowdown
- Designed in accordance with ASME sec. I

APPROVALS



Series 3000S safety valves are without bellows with the bonnet open to atmosphere, therefore any superimposed back pressure will affect the set pressure value, lowering it. Valve performance, and particularly the discharge coefficient at the stated over pressure, is minimally affected by the built-up back pressure value.



HIGH PRESSURE STEAM VALVES SERIES - 200

TECHNICAL SPECIFICATIONS

- Sizes: Up to 6" x 10"
- Set pressure: up to 350 bar g
- Max temperature: 649 °C
- Overpressure: 3%
- Blowdown: 4%
- Designed in accordance with ASME sec. I
- Inlet connections prepared for welding or flange ASME 600-2500

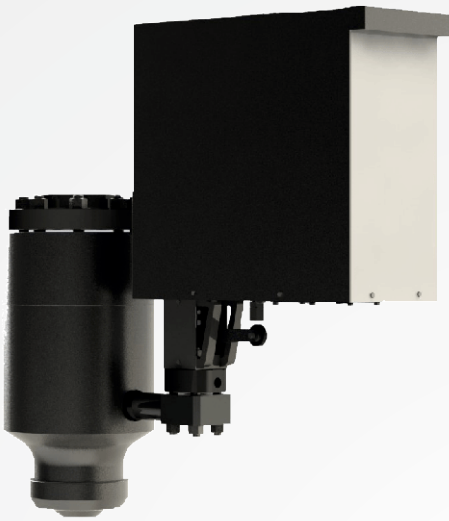
APPROVALS



The Series 200 valves are specially designed for steam boilers, including hypercritical units.

All pressure constraining or mechanically stressed parts are generously sized, in order to ensure the long and safe life of the valve.

The valve is designed to render negligible any effects of temperature variations on its proper operation and to provide a high degree of tightness.



ELECTRICALLY ACTUATED HIGH PRESSURE STEAM VALVES SERIES 100

TECHNICAL SPECIFICATIONS

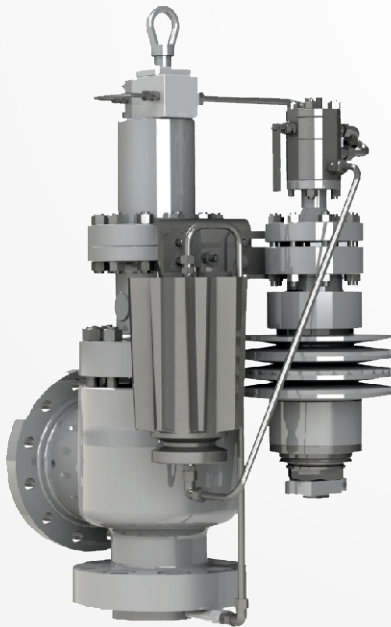
- Size: 2 1/2" x 4"
- Set pressure: up to 310 barg
- Max temperature: 621 °C

APPROVALS



The Series 100 valves are specially designed to protect steam boilers against over pressure, including the hypercritical units.

Due to their manufacturing and operating characteristics these valves offer exceptional performances such as: no over pressure; blow down adjustable to very small values (2%); superior tightness, which is not affected by the value of the difference between opening and normal operating pressures; possibility to open and close the valve from a remote control room, at any process pressure.



PILOT OPERATED VALVE FOR SUPERHEATED WATER & STEAM

TECHNICAL SPECIFICATIONS

- Orifice: form D to T1
- Set pressure range: 10 to 280 barg
- Temperature limit: 375 °C
- Overpressure: 3%
- Blowdown: 4%
- Designed in accordance with ASME sec. I

APPROVALS



These valves are the manufacturing variation with reduced capacity of the type 9000. The valve has a cast body, generally similar to that of a spring loaded safety valve. The cover flange takes the place of the bonnet. The inlet is of the full nozzle type. The nozzle is in stainless steel (or better material) in this way maximum reliability and sturdiness are ensured. The risk of the seat distortion due to thermal differences or stresses transmitted by piping is reduced to a minimum. The nozzle can be removed from the body. This considerably simplifies maintenance and permits, if necessary, that the valve seat be reconditioned with a machine tool. The valve is always supplied with internal pressure pick-up. The pick-up is located in the nozzle, at the inlet, where speed is lowest, to ensure the highest degree of accuracy with the minimum disturbance to flow.



PILOT OPERATED VALVE SERIES - 9000

TECHNICAL SPECIFICATIONS

- Inlet sizes: Up to 12"
- Orifice sizes: D to V inclusive
- Set pressure range: 0.2 to 520 barg
- Temperature range: -180 to 320 °C
- Overpressure range: 1 to 5%
- Materials: Carbon or stainless Steel or special alloys
- Full nozzle design : Fixed or adjustable blowdown (2% min.)
- Standard face to centre dimensions conforming to API std. 526.

APPROVALS



The pressure chamber is moved outside the valve body to minimize the influence of the process fluid temperature. The service temperature range of the valves, when equipped with non-flowing pilots, is greatly increased.



LOW PRESSURE PILOT OPERATED VALVE SERIES - 9010

TECHNICAL SPECIFICATIONS

- Inlet sizes: Up to 12"
- Orifice sizes: H to W2 inclusive
- Set pressure range: 0.01 to 0.5 bar g
- Temperature range: -196 to 100 °C
- Overpressure: 5%
- Materials: Carbon or stainless Steel or special alloys
- Full nozzle design
- Blowdown: fixed < or = to 5%

The opening and closing of the safety valve are controlled by the pilot. The pilot senses the process pressure through a sensing line that connects it to the protected system or to the internal pressure pick-up.

In normal operating condition the process pressure, which is connected to the actuator case through the pilot, keeps the valve closed. When the system pressure increased and reaches the pilot opening sensing pressure, the pilot outlet is connected to valve body whilst the pilot inlet is totally or partially closed. The pressure above the diaphragm of the actuator diminish and the valve opens.

ORDERING INFORMATION

For proper and timely processing of your Enquiry / RFQ or ORDER, the following information should be given:-

- Quantity
- Service Fluid
- Inlet and Outlet Size
- Set Pressure
- Temperature
- Service
- Required Flow Capacity

Please send all your communications to srv@securamax.in

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