

Pressure & Flame Protection



Bailey

Safety & Regulating Valves

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Pressure Reducing Valves - These valves are installed where there is a requirement to reduce the pressure from one level to another and to maintain the reduced pressure within predetermined limits, irrespective of fluctuations in the inlet pressure or change in flow demand. The valve is automatic in operation.

G4 Series

The Bailey G4 Series of pilot operated pressure reducing valves provide extremely accurate levels of pressure regulation for steam, air and industrial gas applications. This is accomplished with a highly sensitive pilot which provides a constant outlet pressure, irrespective of erratic inlet pressure or system demand.

DA Series

Anywhere boilers, compressors or pumps produce high pressure service media for use on multiple low pressure applications, Bailey DA pressure reducing valves have demonstrated proven reliability over a number of years. DA pressure reducing valves are used in the construction of hotels, high rise buildings, hospitals, textiles, paper and steel mills, rubber, food, drink, chemical and pharmaceutical processes.



Safety Relief Valves - A valve which, depending on its application, automatically discharges gases, vapours, or liquids to prevent a predetermined safe pressure being exceeded.

700 Series

700 Series safety relief valves offer protection against overpressure for steam, water, air, industrial gas and liquid process applications. Features such as full lift, top guided construction and unobstructed seat bore allow these valves to offer full protection with maximum discharge capacity. 700 Series valves are often used on boilers, compressors, pressure vessels, process pipelines and pressurised equipment.

480/490 and 616D

This range of safety relief valves provides protection against system overpressure on a wide range of applications, including pump by-pass and air blower applications.

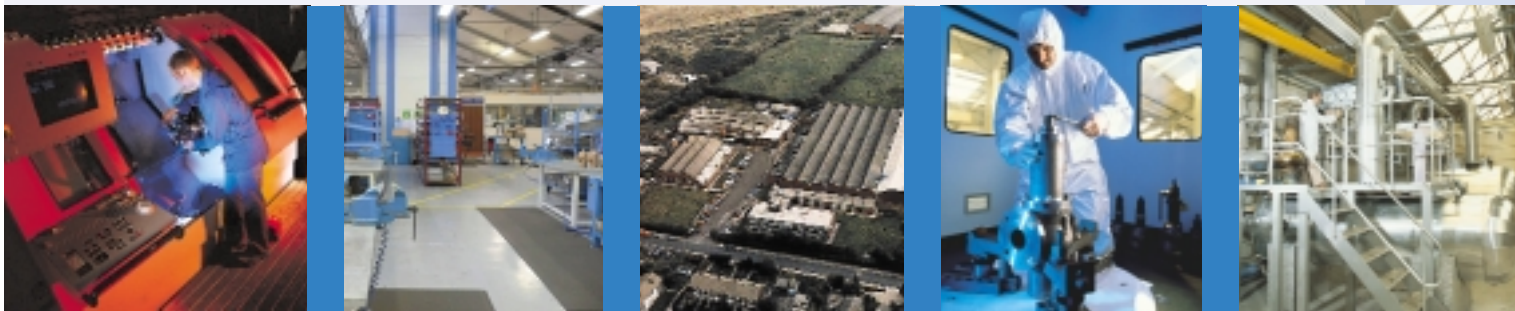


Associated Products

This range of products offers visual inspection of processes operating with steam, air, gases, water and process fluids. All components present little or no resistance to flow and are therefore ideal for use with processes where uninterrupted flow is required.

Pressure Protection

At Bailey we believe that safety is an area that can accept no compromise. That is why all of the products that we manufacture are of the highest quality, helping customers to protect their plant and personnel.



Technical Expertise and Flexibility

It isn't just our products that are of the highest quality - we also possess unrivalled technical expertise in this market and our engineers are trained to offer engineered solutions to all manner of application problems. From experience, we know that each application can have its own special set of circumstances and we strive to cater for them all. Our products are available in a range of materials and we have an extensive range of accessories for all product lines, designed to comply with international codes and to suit system requirements.

Testing Facilities

Our facility in Manchester possesses a clean room and degreasing tank, which enables the assembly and testing of valves for low temperature LNG/LPG duties and cryogenic industrial gas applications.

Support

Worldwide sales and support facilities are available, where engineers and support staff can review individual customer requirements to provide effective local solutions.

Quality

All of our products are quality engineered from proven designs and are manufactured in accordance with ISO9001. We operate a policy of continuous product development, ensuring that our products achieve optimum levels of performance and reliability.

PED/ATEX

All products that require certification in accordance with European legislation are fully PED and ATEX approved.

Also available:

- **Birkett** - API/ASME spring loaded and pilot operated safety relief valves and thermal relief valves.
- **Amal** - Flame arresters.
- **Marston** - Bursting discs and explosion vent panels.
- **Marvac** - Tank protection valves.
- **Cash** - Cryogenic valves.



G4 Pilot Pressure Reducing Valves

The main valve is controlled by the operation of a pilot valve, which is itself a small direct acting reducing valve.

The pilot valve acts to regulate the amount of opening of the main valve in a way that will

maintain the desired outlet pressure.

Pilot operated valves provide very close accuracy of pressure control, and due to their high flow rates, pilot valves will often be smaller than the comparable direct acting valve.



Valve Size	Maximum Inlet Pressure	Reduced Pressure Range	Temperature Range	Materials
15mm to 150mm (1/2" to 6")	41.4 Barg (600 Psig)	0.07 to 20.7 Barg (1 to 300 Psig)	-20°C to 427°C (-4°F to 800°F)	Bronze Cast Iron Cast Steel Stainless Steel

DA Series Pressure Reducing Valves

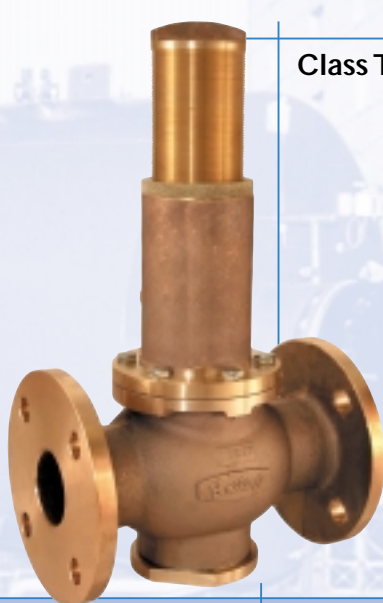
In a direct acting pressure reducing valve, the controlled pressure acts directly through a diaphragm or piston on an imposing force from a compressed helical spring. The construction is simple and robust; such valves can provide long life with maintenance free operation, even under adverse working conditions.

Although the pressure control provided by direct acting valves is not as accurate as with pilot operated valves, they are less costly and there are many applications for which their control and performance is more than adequate.



Class F

Class T



Class TH



C10



Bailey B

Valve Size	Maximum Inlet Pressure	Reduced Pressure Range	Temperature Range	Materials
15mm to 150mm (½" to 6")	41.4 Barg (600 Psig)	0.35 to 20 Barg (5 to 290 Psig)	-20°C to 230°C (-4°F to 450°F)	Bronze Cast Iron

700 Series Safety Relief Valves

Safety relief valves should be used on any closed vessel or system in which the pressure can be other than atmospheric or the design pressure of the system can be exceeded. In any process, imbalance in rates of fluid flow or energy transfer into or out of process

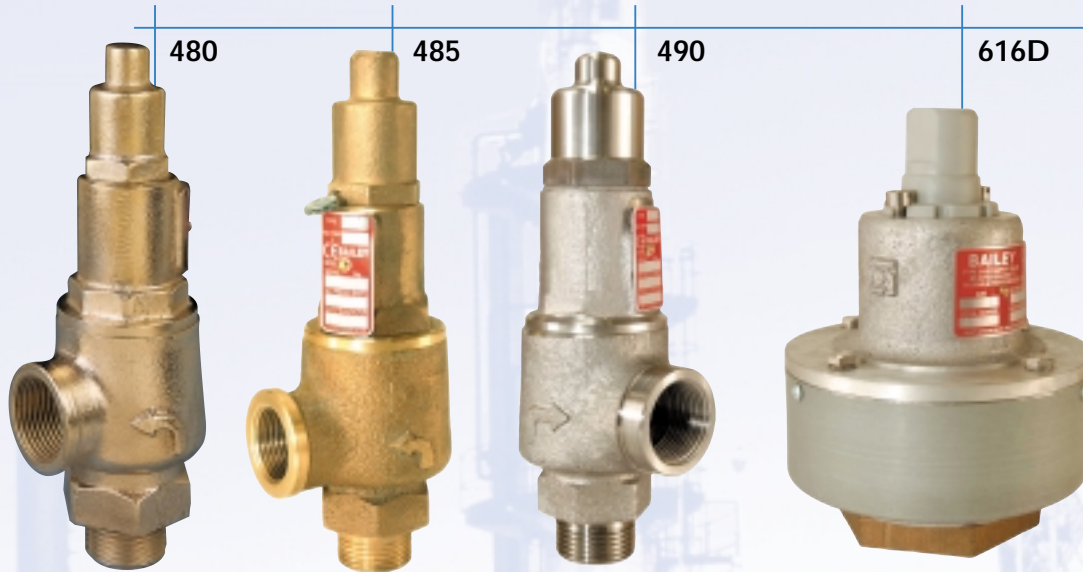
equipment may result in the pressure exceeding the operating pressure.

If, for these or other reasons, the pressure exceeds prescribed limits it must be relieved by a safety relief valve.



Valve Size	Pressure Range	Temperature Range	Materials
15mm to 100mm (½" to 4")	0.35 to 102 Barg (5 to 1480 Psig)	-270°C to 427°C (-454°F to 800°F)	Bronze Cast Iron Carbon Steel Stainless Steel

480/490 and 616D



Valve Size	Pressure Range	Temperature Range	Materials
20mm to 100mm (3/4" to 4")	0.2 to 24 Barg (2.9 to 350 Psig)	-59°C to 260°C (-74°F to 500°F)	Bronze Stainless Steel

Associated Products

Sightglass



Glass available with 'CORWRAP'
shatter protection

Type	Size	Maximum Pressure	Temperature Range	Materials
Sightglass	25 to 150mm (1" to 6")	9 Barg (130 Psig)	-50 to 200°C (-58 to 392°F)	Stainless Steel / Glass



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