



## BAILEY BIRKETT SAFETY RELIEF VALVES

# 746

### SINGLE FULL LIFT SAFETY RELIEF VALVE



#### Part No. 746

#### FULL LIFT SAFETY RELIEF VALVE - FLANGED

The 746 safety relief valve incorporates a freely pivoting disc, which ensures correct alignment with the nozzle. The combination of top guiding, unobstructed seat bore and full lift capability ensures the highest possible discharge rate.

The 746 safety relief valve is available in both conventional and balanced bellows types, and features a special disc style for liquid application, ensuring trouble free performance.

The 'conventional' arrangement is suitable for applications where the built up pressure will not exceed 5%. The conventional valve can also be used in systems where the superimposed backpressure is at a constant level (up to 80%).

The 'balanced bellows' arrangement is for applications where several safety relief valves discharge into a common discharge manifold, or in any circumstances where a variable back pressure can occur, up to a maximum of 40%.

#### Features & Benefits

- Approved to BS6759 Pt 1, 2 & 3.
- Can be approved to ASME VIII & TUV-AD Merkblatt A2 on request.
- Top guided design.
- Full lift maximum discharge capability.
- Top un-wetted guiding giving unobstructed seat bore.
- Discharge capacity at 5% overpressure on steam
- Low stress springs to BS6759.
- Stocked valves set & certified to your exact requirements in our workshop.

#### Pressure & Temperature

Pressure range:-

DN25 - DN50 : 0.35\* to 40\*\* bar  
DN65 : 0.35\* to 35\*\* bar  
DN80 : 0.35\* to 32\*\* bar  
DN100 : 0.35\* to 25\*\* bar

\* Min pressure is greater for bellows valves  
\*\* Max pressures reduced over 120°C

Temperature Range:-

Body  
Carbon Steel : -29°C to 427°C  
Stainless Steel : -46°C to 427°C

Trim  
Stainless Steel : -46°C to 427°C  
Viton : -29°C to 200°C  
PTFE : -46°C to 220°C  
EPDM : -29°C to 150°C

#### **746 Dimensions**

SIZE	INLET	OUTLET	A	B	C (Dome)	C (Lever)	C (Bellows)
DN25	25	40	105	100	410	410	445
DN32	32	50	115	110	455	455	490
DN40	40	65	140	115	570	570	605
DN50	50	80	150	120	615	615	665
DN65	65	100	170	140	725	725	785
DN80	80	125	195	160	825 / 925#	825 / 925#	865 / 965#
DN100	100	150	220	180	925 / 1030#	925 / 1030#	955 / 1060#

# High pressure option, contact sales for further details.

#### **746 Options**

VALVE TYPE	SIZE	CONNECTIONS	BODY	FEATURES
Conventional	25 x 40mm 65 x 100mm	PN16 x 16 BS10 F x E	Carbon Steel	Domed Cap NACE Materials
Bellows	32 x 50mm 80 x 125mm	PN40 x 16 BS10 H x F	Stainless Steel	Ferrule Packed Lever
Liquid Conventional	40 x 65mm 100 x 150mm	ANSI 150 x 150 BS10 J x F		Gag Resilient Seat
Liquid Bellows	50 x 80mm	ANSI 300 x 150		Open Lever High Pressure

**FOR CAPACITIES & FURTHER DETAILS, CONTACT SALES OFFICE**