

766 Safety Relief Valve

TECHNICAL SPECIFICATION



Approvals

BS6759 Pt 1
PED certified Category IV

Materials

Body - Carbon St. gr WCB (-29 to 230°C)
Trim - Stainless Steel (-29 to 230°C)

Size Range

Size	Orifice mm ²	Min (Barg) Pressure	Max (Barg) Pressure
DN40 (1½")	2280	0.35	24
DN50 (2")	4054	0.35	24
DN65 (2½")	6334	0.35	24
DN80 (3")	9121	0.35	24

Performance

	Kdr	Over pressure	Blow down
Steam	0.4	10%	10%*

*or 0.3 Barg min

Maximum Back Pressure

Barg	CS 12 / CI 6
Constant	0%
Built-up	50%
Variable	0%

(Total % must not exceed Barg shown)

Connections

Flanged In x Flanged Out

Construction

Top Guided / High Lift

Cap Options

Open lever fitted as standard

Sizing

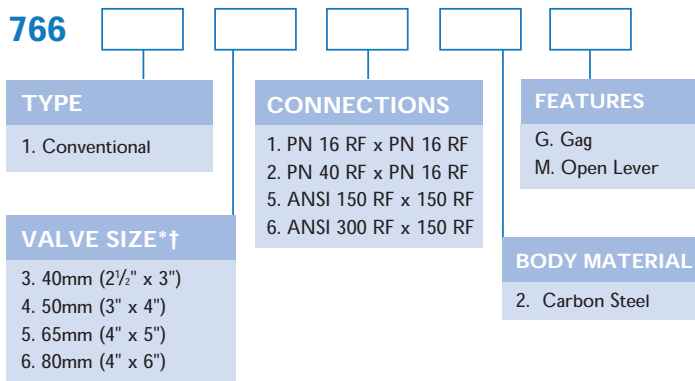
Refer to Capacity Charts (page 60-67)

DESIGN

The 766 Safety Valve is a double spring high lift valve with high discharge capacity. The top guided piston design incorporates an adjustable blowdown ring and meets all the requirements of BS6759 Part 1.

A freely pivoting disc and precision lapped stainless steel trim gives positive re-seating for steam duty. Fitted as standard with test lever for inline testing. Ideally suited to applications on steam boilers and pipelines where blowdown tolerances are critical.

FIGURE NUMBERING



*Flange sizes are larger than the valve size, refer to the dimension table

Notes:

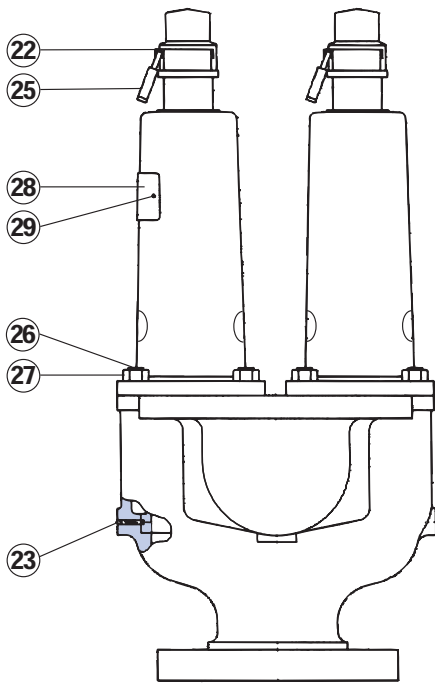
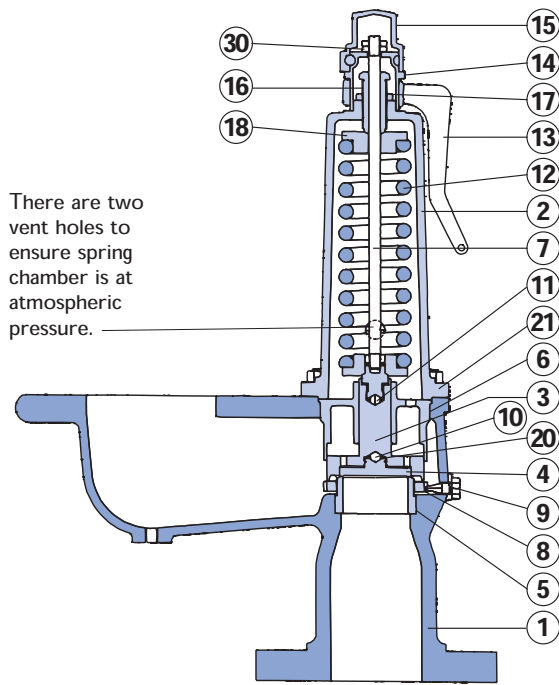
A. Any special requirements will be indicated by the letter X which will be agreed with the sales office. For example, paint specification or spring material.

B. Any combination of features can be called up eg. MG etc.

C. Flange options are dependant on Valve Body materials, as detailed opposite.

† Please see table on page 22 for inlet and outlet connection sizes.

PARTS



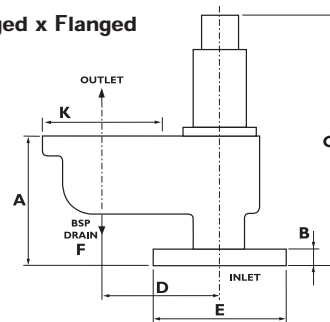
ITEM	PART	MATERIAL
1	Body	Carbon Steel
2	Cover	Carbon Steel
3	Valve Disc Holder	Bronze
4*	Valve Disc	St.St.
5	Seat Ring	St.St.
6	Guide	Bronze
7	Spindle	St.St.
8	Blow Down Ring	St.St.
9	Setting Screw	St.St.
10*	Valve Disc Ball	St.St.
11*	Spindle Ball	St.St.
12*	Spring	Chrome Vanadium
13	Easing Lever	SG Iron
14	Dome	Bronze
15	Dome Cap	Carbon Steel
16	Adjusting Screw	Brass
17	Locknut	Brass
18	Spring plate	Plated Steel
20*	Disc Retaining Clip	St.St.
21*	Body Gasket	Garlock
22	Locking Pin	Brass
23	Seat Securing Pin	St.St.
25	Padlock	Brass
26	Body Stud	Steel
27	Body Stud Nut	Steel
28	Nameplate	St.St.
29	Nameplate screw	Steel
30	Locknut	Steel

Note:

* Recommended spares; available from Safety Systems UK Ltd.
Recommended inspection every 12 months.

DIMENSIONS

Flanged x Flanged



Valve Type	Valve Size	Inlet†	Outlet†	A	B CS	C CS	D	E CS	F (BSP) DRAIN	K CS	Weight (kg)
Flanged	DN40	2½"	3"	197	22	452	156	185	⅜"	200	25
	DN50	3"	4"	229	24	498	181	200	½"	220	38
	DN65	4"	5"	279	24	660	219	235	½"	250	58
	DN80	4"	6"	295	24	702	238	235	½"	285	83

Flange sizes listed are for:
Carbon Steel Flanges PN 40x16
Others available on request.

All dimensions in mm.