

# FIG 500L PRESSURE RELIEF VALVE

#### **FEATURES & BENEFITS**

The NABIC Fig 500L is designed primarily for use where high tightness is required on the discharge side. A sealed spring cover prevents the possibility of back pressure leakage through the top of the valve. The lift is progressively proportional to flow. All wetted parts are manufactured from dezincification resistance materials. Designed and tested to BS EN ISO 4126 -1. WRAS approved\*.

\*See Table 1

- Size Range: DN15 DN65
- Resilient PTFE seating design with high degree of seat tightness
- Pressure tight on discharge side
- Suitable for liquids and inert gases
- Available with Viton seat design
- Pressure setting locked and sealed
- · Drain plug fitted on DN32 and above
- WRAS approved



#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX SET TEMPERATURE (°C)		
DN15 to DN25 1.0 to 12.5	-20 to 195		
DN32 to DN65 0.4 to 12.5	-20 to 195		

#### **DIMENSIONS & WEIGHTS**

SIZE DN	Rp BSP Inlet	Rp BSP Outlet	A (mm)	B (mm)	C (mm)	WEIGHTS (kg)
15	1/2"	3/4"	33	20	123	0.70
20	3/4"	1"	39	24	136	0.93
25	1"	1 1/4"	45	30	155	1.42
32	1 1/4"	1 1/2"	54	36	201	2.50
40	1 1/2"	2"	64	41	236	4.63
50	2"	2 1/2"	76	47	267	7.00
65	2 1/2"	3"	90	60	330	12.50

# **PART NAME & MATERIALS**

NO.	PART NAME	MATERIAL
1	Leak Proof Dome	Bronze, BS EN 1982 CC491K
2	Locknut	Brass, BS EN 12164 CW609N
3	Dome 'O' Ring	Viton
4	Spring	Chrome Vanadium Alloy Steel, BS 2803 735 A50 HS (Stainless Steel, BS 2056 302S26 Opt)
5	Label	Yellow kapton
6	Spring Cover	Bronze, BS EN 1982 CC491K
7	Piston	Brass, BS EN 12164 CW609N
8	Cover Seal	Viton
9	Seat Seal Holder	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Bronze, BS EN 1982 CC491K
13	Adjusting Screw	Brass, BS EN 12164 CW609N
14	Spring Plate	Brass, BS EN 12164 CW609N
15	Spindle	Brass, BS EN 12164 CW721R
16	Seat Seal Retaining Plate	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
17	O-Ring	Viton

#### **MEDIUM**

Hot water, steam, compressed air, inflammable liquids and inert gasses, CO2 (to 20°C), ethylene glycol, potable water.

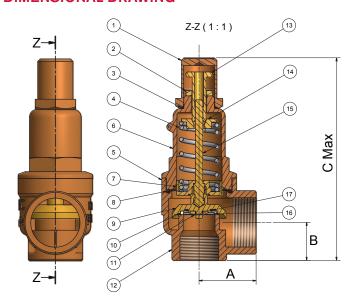
#### PIPE CONNECTIONS

Screwed female inlet and outlet connections. Outlet connection is one size larger than inlet connection. Threaded connections are Rp parallel to BS EN 10226-1. NPT connections are available upon request.

#### **PRODUCT TESTING**

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### **DIMENSIONAL DRAWING**



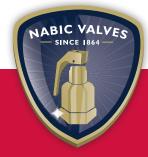
### **APPROVALS**





FM 00311 EMS 553775





#### **DISCHARGE CAPABILITIES**

The discharge capacity of a safety valve must be equal to or greater than the output of the boiler or system it is protecting. To ensure that the correct method of sizing is used, reference should be made to the relevant BS specification for the design of the boiler or system. Fig 500L capacities are tabulated below to assist selection.

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)								
SET	std. litres/sec							
PRESSURE BAR	DN15	DN20	DN25	DN32	DN40	DN50	DN65	
1.0	25	44	69	112	176	274	464	
2.0	38	67	105	171	268	418	707	
3.0	51	90	141	230	360	562	950	
4.0	64	113	177	289	452	706	1193	
6.0	90	159	248	407	636	993	1679	
8.0	115	205	320	525	820	1281	2165	
10.0	141	251	392	642	1004	1568	2651	
12.5	174	308	482	790	1235	1928	3259	

WATER - UNVENTED SYSTEM - 10% OVERPRESSURE								
SET	litres/min							
PRESSURE BAR	DN15	DN20	DN25	DN32	DN40	DN50	DN65	
1.0	54	96	151	247	386	603	1019	
2.0	77	136	213	349	546	853	1441	
3.0	94	167	261	428	668	1044	1765	
4.0	109	193	302	494	772	1205	2037	
6.0	133	236	369	605	945	1476	2496	
8.0	154	273	426	698	1092	1705	2881	
10.0	172	305	477	781	1220	1906	3222	
12.5	192	341	533	873	1364	2131	3602	

To convert to galls/min multiply by 0.22.

# Table 1

FIG. NO	DN SIZE	MIN - MAX SET PRESSURE (BAR)	SEAT SEAL AVAILABLE	WRAS APPROVED WITH VITON SEAL* (BAR)	WRAS APPROVED WITH PTFE SEAL* (BAR)
500L	15-25	1.0 to 12.5	PTFE/Viton	1.0 to 4.0	4.1 to 12.5
500L	32-65	0.4 to 12.5	PTFE/Viton	0.4 to 4.0	4.1 to 12.5

<sup>\*</sup>Viton seals are not suitable for steam applications.



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# N\_Fig.500L