



# BROADY

F L O W C O N T R O L

## Type 2600 Pressure Safety Valve



BROADY FLOW  
CONTROL



*Engineering complete solutions*

## Type 2600

### Pressure Safety Valve

The Type 2600 Relief/Safety Relief valves are designed to have a short 'simmer', then to open rapidly to the full open position, and to re-seat at a controlled pressure. When the valve is in its fully lifted position, the discharge area is controlled by the bore of the nozzle, which ensures that flow calculations for various mediums can be reliably made.

Valves are supplied in sizes ½" to 1" and can be manufactured in Gunmetal, Cast Steel and Stainless Steel with ends screwed male x female, female x female or flanged to customer requirements.

Valves can also be supplied with a packed lever lifting device, limits witch to indicate opening and closing of the valve, governing ring to limit adjustment of the spring to the set point, for ease of re-setting.

#### Installation

During installation of the valve avoid bumping or shaking to prevent damaging the flange faces and misalignment of the trim. Blow through the circuit line on which the valve is to be installed, this is to remove any foreign bodies. Clean the valve and nozzle connections thoroughly; foreign bodies on the nozzle may damage the valve seat during popping. Install the valve in a vertical position only, with the inlet downwards. After the valve has been installed make it pop at least twice to allow automatic alignment of the trim. Misalignment may be caused accidentally during transport or during installation.

#### Maintenance

The most frequent operation to be carried out is a precise check, made a regular intervals, to observe whether any obvious faults exist in the different parts of the valve. It should be checked first of all that there are no leakages: these must always be avoided, especially when the medium is poisonous, highly volatile or very expensive. Carry out periodic venting for valves with a lifting device to check regular operation. During these tests the pressure must be at least 75% of the full working pressure.

#### Overhaul

To overhaul the valve the following procedure should be followed: remove the cap, mark the position of the adjusting screw relevant to the locknut, so the correct position may be found during re-setting. Loosen the adjusting screw and locknut to relax the spring, remove the lockscrew from the body, to free the blowdown ring. Unscrew the nozzle from the body and remove the complete assembly from the inside of the body. Check the contact faces of the seat and disc, should any scratching or pitting be present the surfaces will need to be re-lapped. Replace all of the joints then assemble the valve in reverse order. To prevent damage to the disc and nozzle faces, place a screwdriver in the spindle slot. This will stop the spindle turning whilst re-setting the valve.



#### LIMITS & STANDARDS

**Minimum Set Pressure:** 0.4 Barg  
**Maximum Set Pressure:** 150 Barg

#### Design Standard:

- API 520

#### Materials of construction:

- Gunmetal
- Cast Steels
- Aluminium Bronze
- Monel
- Hastelloy
- Inconel

#### Key Features:

- Full Lift Safety Valve
- Gas, Liquid And Vapour Service
- Short Simmer/Rapid open Design



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## Type 2600

### Pressure Safety Valve (Flanged)

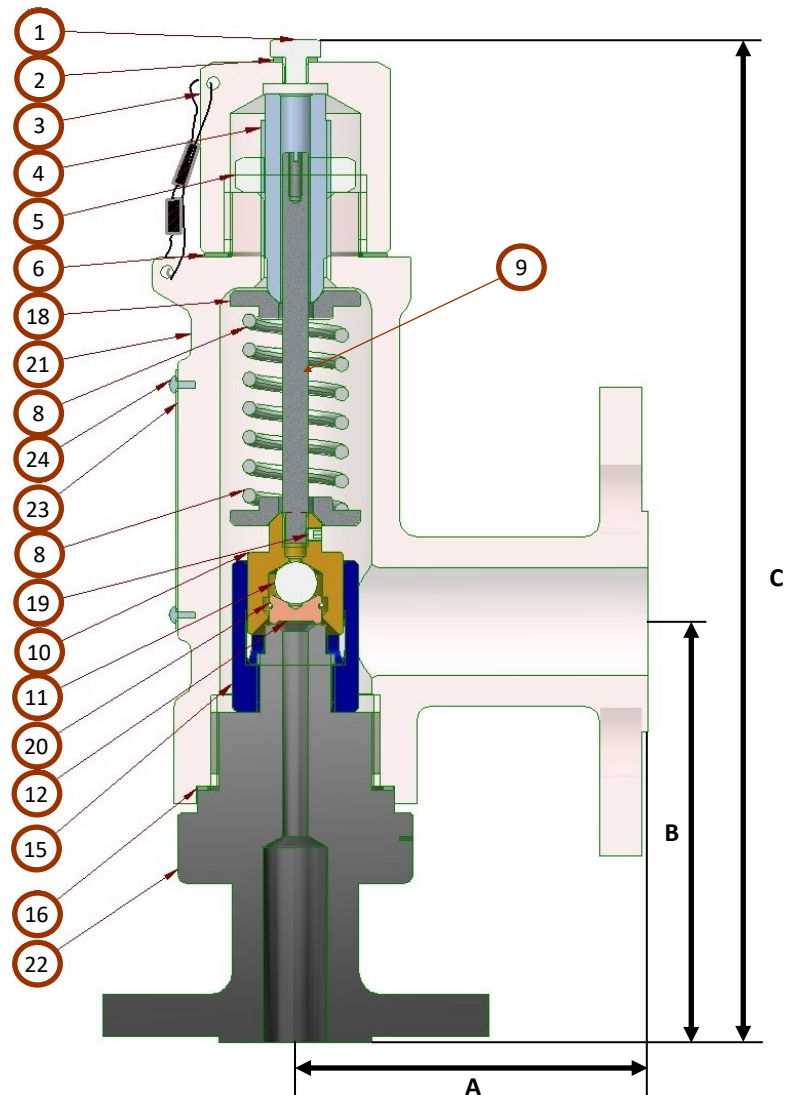
24	Nameplate Rivet
23	Nameplate
22	Nozzle Screwed
21	Body
20	Circlip
19	Grub Screw
18	Spring Carriers
16	Joint (Body)
15	Blowdown Ring
14	Joint (Lockscrew)
13	Lockscrew
12	Disc
11	Ball
10	Disc Holder
9	Spindle
8	Spring
6	Joint (Cap)
5	Locknut
4	Adjusting Screw
3	Cap
2	Joint (Plug)
1	Cap Plug

Items shown in red contained in soft goods kit

Item	Title
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#### HOW TO ORDER

To enable Broady flow Control to offer the most suitable valve for your service, please provide the following information at the enquiry stage: Set Pressure, Medium, Temperature, Back Pressure and Flow.



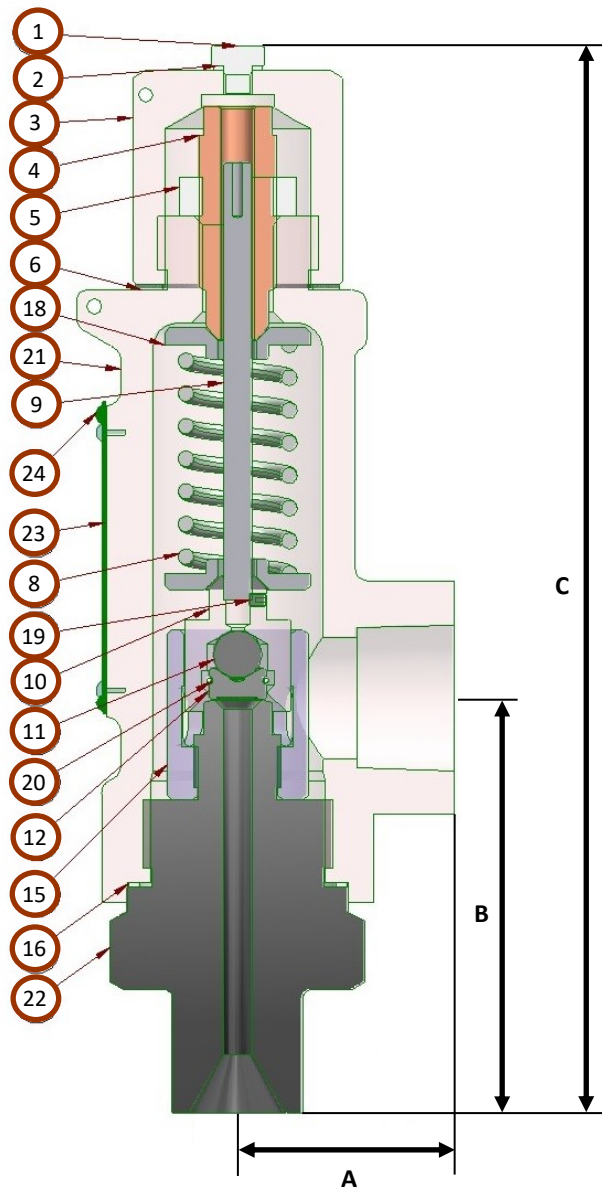
	ANSI 150			ANSI 300			Weight
Valve	A	B	C	A	B	C	
½" x 1"							
¾" x 1"	81	97	231	81	103.5	237	6.0
1" x 1"							

Dimensions (mm)



## Type 2600

### Pressure Safety Valve



Valve Size	A	B	C	Weight (Kg)
½" x 1"	44.5	85.5	219	3.0
¾" x 1"				
1" x 1"				

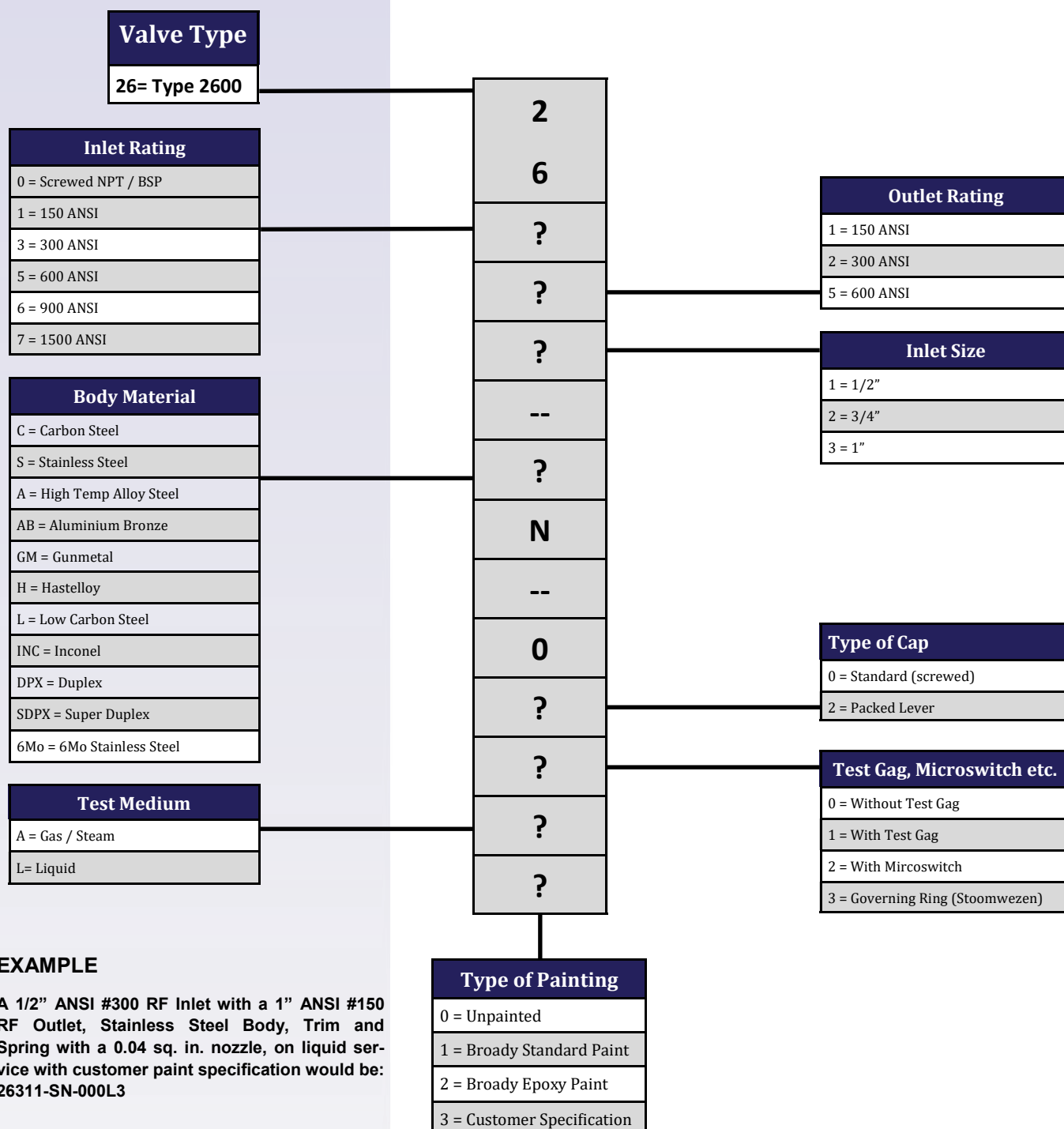
Dimensions (mm)

24	Nameplate Rivet
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## Type 2600

### Valve Coding





## Type 2600 Capacity Tables

Saturated Steam Capacities (Lbs/hr)			Water Capacities (US Gallons/minute)			Air Capacities (Ft <sup>3</sup> /hr)		
Set Pressure PSIG	Orifice Area (sq.in.)		Set Pressure PSIG	Orifice Area (sq.in.)		Set Pressure PSIG	Orifice Area (sq.in.)	
	0.04	0.06		0.04	0.06		0.04	0.06
10	45	68	10	3.3	5	10	15	23
30	59	89	30	5.8	8.6	30	29	43
50	122	184	50	7.5	11.2	50	42	63
70	161	242	70	8.8	13.2	70	55	82
100	219	328	100	10.5	16	100	75	112
150	315	473	150	13	19.4	150	108	162
200	412	618	200	15	22.4	200	141	211
250	508	763	250	16.7	25	250	174	261
300	605	907	300	18.3	27.4	300	207	310
350	700	1052	350	20	29.6	350	240	360
400	798	1197	400	21	31.6	400	273	409
450	895	1342	450	22.3	33.6	450	306	458
500	990	1487	500	23.6	35.4	500	339	508
600	1185	1776	600	26	38.7	600	405	607
700	1377	2066	700	28	42	700	470	706
800	1570	2356	800	30	44.7	800	537	805
900	1764	2645	900	31.7	47.5	900	603	904
1000	1957	2935	1000	33.4	50	1000	669	1003
1200	2343	3515	1200	36.5	55	1200	800	1200
1500	2922	4383	1500	41	61	1500	1000	1500
1700	3310	4963	1700	43.5	65	1700	1130	1700
2000	3900	5830	2000	47	71	2000	1330	1995



# BROADY

F L O W C O N T R O L

## Broady Quality



Broady Flow Control Limited, over its many years of trading, has developed into a highly efficient and customer focused organisation, well placed to satisfy the ever changing requirements of the industry. Renowned for innovation, flexibility and integrity.



Broady has a well established and robust quality management system which supports order processing and manufacturing, ensuring the highest standards are maintained at all times.



The dedicated management team is supported by a highly skilled and dedicated workforce trained in all engineering disciplines. The future of Broady is assured by the policy of employment and training of young dynamic apprentices who are fully involved in the development and implementation of the quality management system.

At the heart of Broady's philosophy is the desire to strive for continual improvement and complete customer satisfaction through the process of internal and external audits designed to ensure a "right first time" environment.

Broady Flow Control Limited is committed to maintaining and continually improving the quality of the products and services offered to all its customers.

## Valves from the Broady Product Range



**3500 Series Pressure Safety Valves**



**Fire Fighting (Hydrant Valves)**



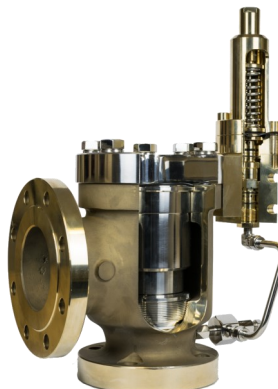
**Type 3600, 2600, 180 & 180-S  
Safety Valves**



**Sustaining Valves  
(Type A, Type D, Type 8, Type 9)**



**Reducing Valves (A, AB, C, D, B2)**



**Type 4000 Pilot Operated Safety Relief Valve**