



BROADY

F L O W C O N T R O L

Type D

Balanced Self Acting Pressure Regulator



BROADY FLOW
CONTROL



Engineering complete solutions

Call Us on 01482 619600

Visit us at www.broady.valvitalia.com

Type D

Balanced Self Acting Pressure Regulator

The Type D pressure reducing valves are high performance valves specifically designed to optimise the stringent requirements of the fluids handling industry. Principal features include high capacity, balanced internal parts which permit fluctuating inlet pressures and ensure a stable downstream pressure. Tight shut off results under no flow conditions. The Type D, by virtue of its inherent advanced design, yet simplicity, and a minimum of moving parts, provides maximum service life, reliability and accuracy of control. The Type D is also a **WRAS - Approved Product**, in sizes 2½" to 6".

Valves are supplied in sizes ½" to 6" in SG Iron, Bronze, Stainless Steel or materials to suit the process requirements, with ends screwed female or alternatively flanged to customers requirements. Inlet pressures of up to 20.0 Barg can be accommodated, reduced pressure ranges of 0.35 - 13.8 Barg are possible. The maximum working temperature of the type D is 100°C.

Specification

All valves are supplied with a nitrile disc and seals for liquids as standard, but other materials are available on request.

Description of Action

High pressure fluid is admitted to the inlet port and acts both on the seat disc and smaller, lower piston areas, which are collectively balanced and therefore unaffected by any initial pressure variations. Compression of the spring opens the seat disc and permits the flow of fluid to the downstream pressure side of the valve, and through a cast internal port to the upper, larger piston chamber. At this point, the reduced pressure acts upon the upper piston area, creating an upward force, which opposes the downward spring load. Therefore, when the force of the reduced pressure in the upward direction exceeds the adjusted spring opening load, the seat disc tends to close, so restricting fluid flow through the valve and reducing its pressure until the desired set pressure is restored by the two forces in balance. Conversely, if the reduced pressure should fall, the spring load would be dominant and the seat disc would open, to permit a greater volume of fluid to flow until the set reduced pressure is reached and maintained at the valve outlet port.

Compressing the spring **increases** the reduced pressure, **relaxing** the spring **decreases** the reduced pressure.

Installation

All valves should be fitted in a horizontal pipeline with, flow in the direction of the arrow cast on the side of the body. The adjusting screw should be directly above or below the pipeline. The pipe must be clean and free from dirt, scale, etc. It is advisable to fit a stop valve on the high pressure side of the line. A relief valve should always be fitted where dead end conditions apply.



Limits And Standards

Maximum Inlet Pressure: 20.00 Barg

Reduced Pressure Range: 0.35 to 13.8 Barg

Design Standard:

- **ISA-75.01-1985/95**

Materials of construction:

- **Gunmetal**
- **Cast Steels**
- **Aluminium Bronze**
- **Monel**
- **Hastelloy**
- **Inconel**
- **SG Iron**

CV Range

- **2 to 64**



BROADY

F L O W C O N T R O L

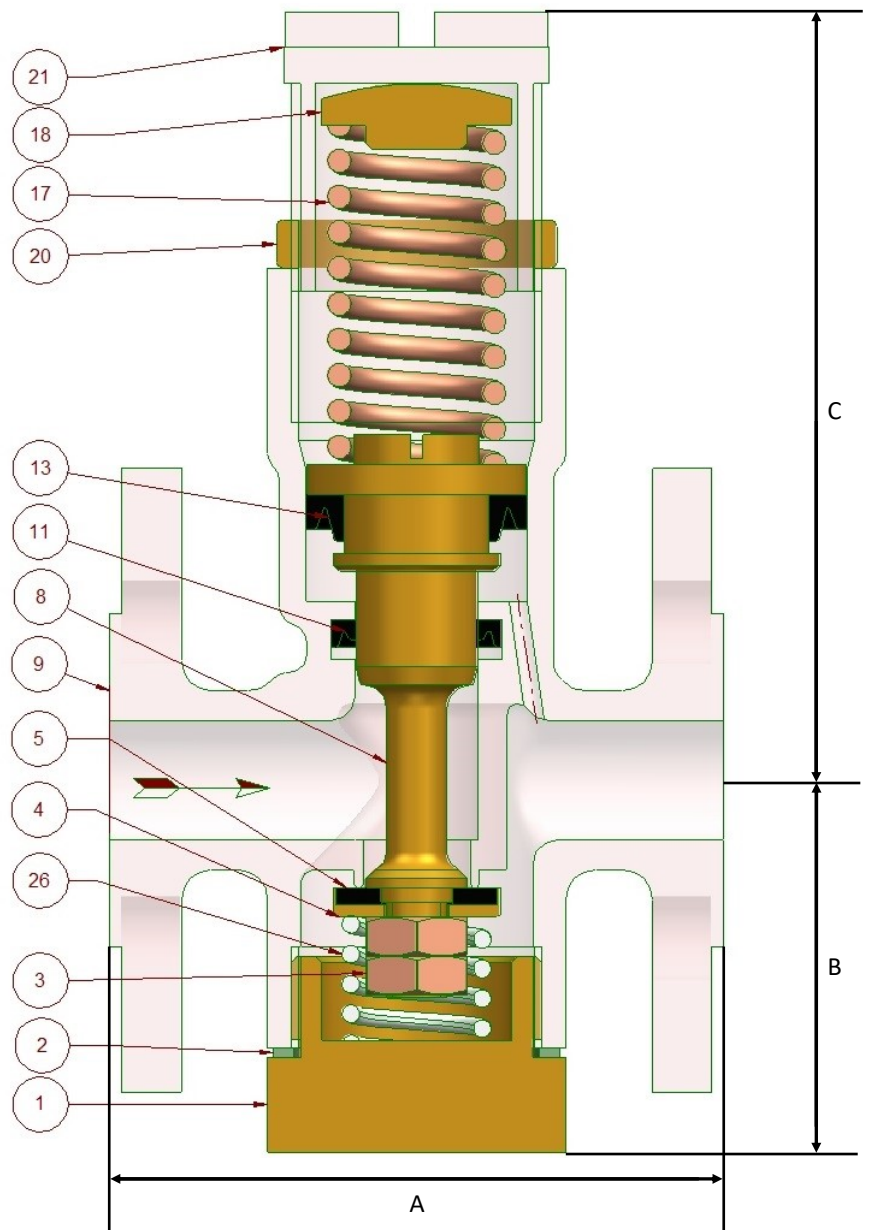
Type D

Balanced Self Acting Pressure Regulator (15-20mm)

26	Load Spring
21	Adjusting Screw
20	Locknut
18	Spring carrier
17	Spring
13	Seal (Large)
11	Seal (Small)
9	Body
8	Spindle
5	Disc
4	Disc Holder
3	Locknut
2	Joint
1	Bottom Cap
*Items shown in red contained in soft goods kit	
Item	Title

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:



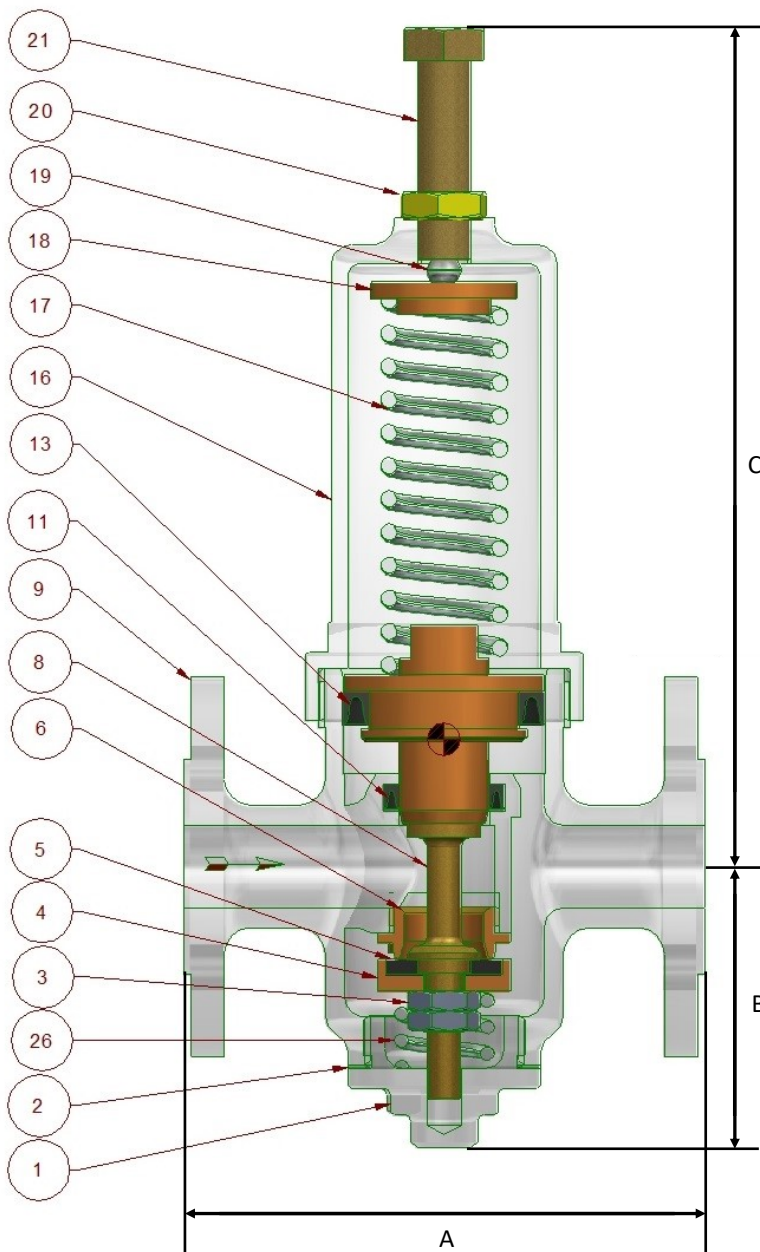
Size	A	B	C
15NB	105	63	130 (Max)
20NB	105	63	130 (Max)

Call Us on 01482 619600



Type D

Balanced Self Acting Pressure Regulator (25mm)



Size	A	B	C
25NB	155	86	250 (Max)

26	Load Spring
21	Adjusting Screw
20	Locknut
19	Ball
18	Spring carrier
17	Spring
16	Dome
13	Seal (Large)
11	Seal (Small)
9	Body
8	Spindle
6	Seat
5	Disc
4	Disc Holder
3	Locknut
2	Joint
1	Bottom Cap
*Items shown in red contained in soft goods kit	
Item	Title

Please contact the Broady Flow Control sales team who will be happy to assist you in selecting the correct valve for your requirements.

Email: sales@broady.co.uk

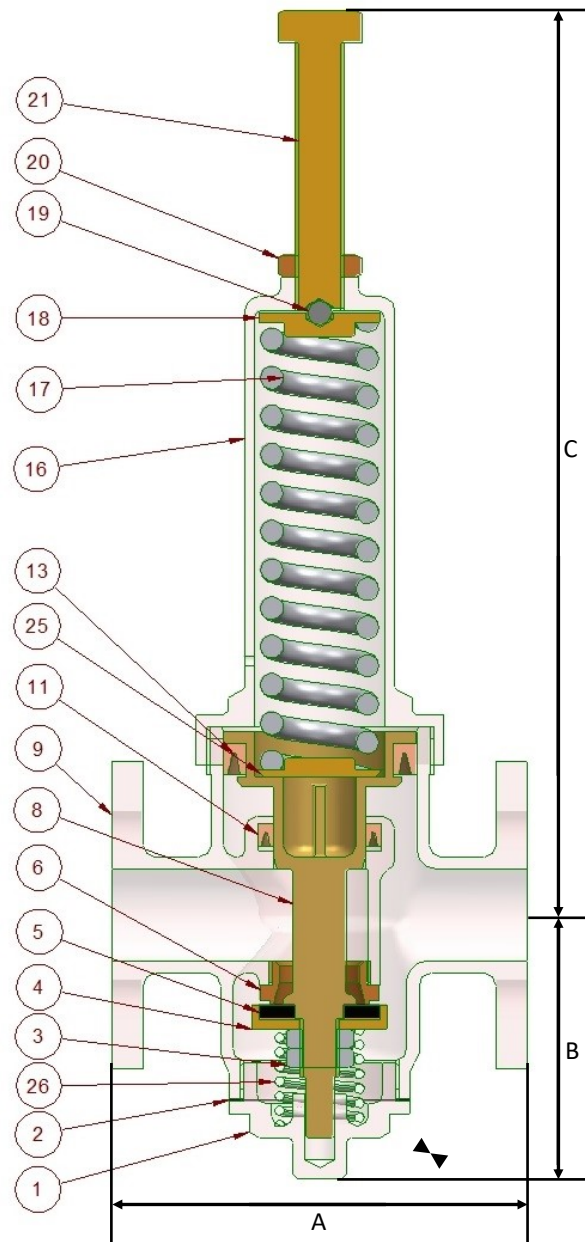
Type D

Balanced Self Acting Pressure Regulator (40-50mm)

26	Load Spring
25	Spring Locator
21	Adjusting Screw
20	Locknut
19	Ball
18	Spring carrier
17	Spring
16	Dome
13	Seal (Large)
11	Seal (Small)
9	Body
8	Spindle
6	Seat
5	Disc
4	Disc Holder
3	Locknut
2	Joint
1	Bottom Cap
*Items shown in red contained in soft goods kit	
Item	Title

How To Order

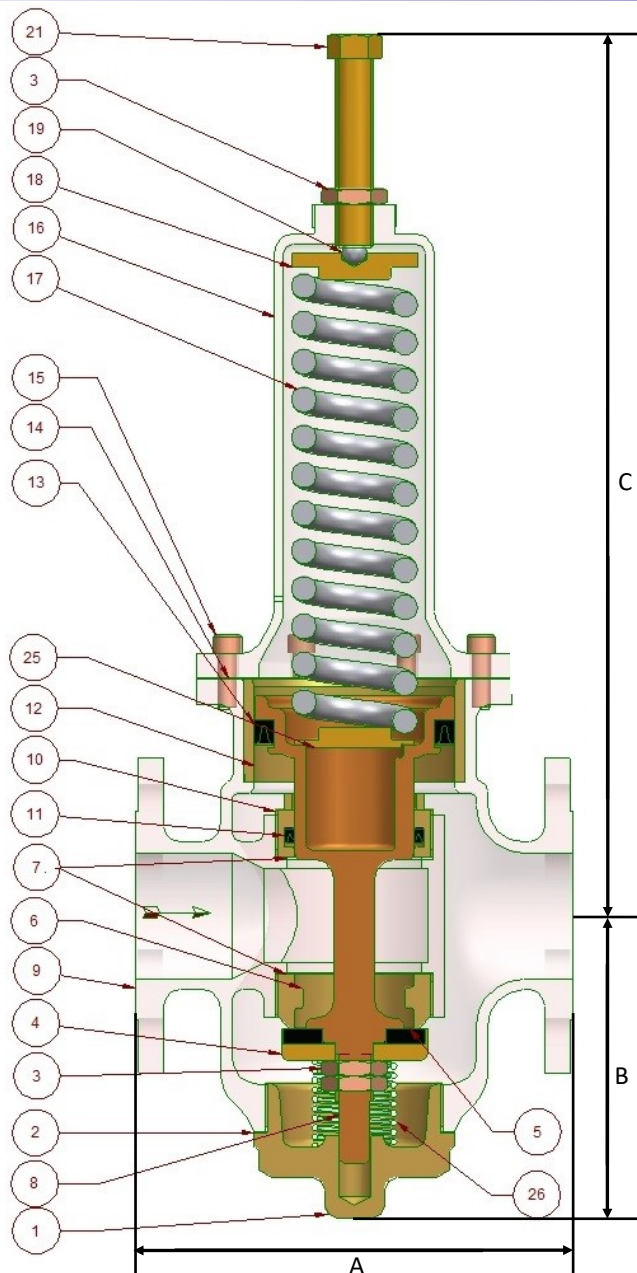
To Enable Broady flow Control to offer the most suitable valve for your service, please provide the following information at the enquiry stage:



Size	A	B	C
40NB	172	110	345 (Max)
50NB	172	128	375 (Max)

Type D

Balanced Self Acting Pressure Regulator (65-100mm)



Size	A	B	C
65NB	222	160	420 (Max)
80NB	276	190	562 (Max)
100NB	325	230	690 (Max)

26	Load Spring
25	Spring Locator
21	Adjusting Screw
20	Locknut
19	Ball
18	Spring carrier
17	Spring
16	Dome
15	Set Screws
14	Joint
13	Seal (Large)
12	Liner
11	Seal (Small)
10	Seal Guide
9	Body
8	Spindle
7	Joint
6	Seat
5	Disc
4	Disc Holder
3	Locknut
2	Joint
1	Bottom Cap

*Items shown in red contained in soft goods kit

Item	Title
------	-------

Please contact the Broady Flow Control sales team who will be happy to assist you in selecting the correct valve for your requirements.

Email: sales@broady.co.uk



BROADY

F L O W C O N T R O L

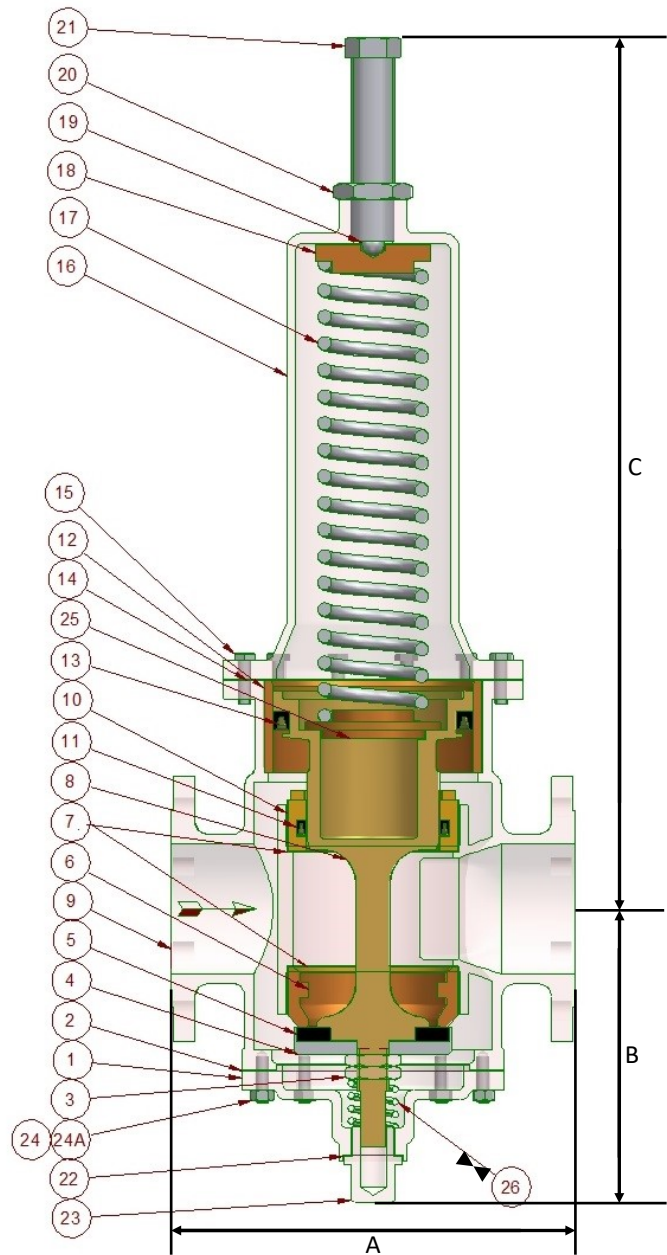
Type D

Balanced Self Acting Pressure Regulator (125-150mm)

26	Load Spring
25	Spring Locator
24	Studs & Nuts
23	Guide Bush
22	Joint
21	Adjusting Screw
20	Locknut
19	Ball
18	Spring carrier
17	Spring
16	Dome
15	Set Screws
14	Joint
13	Seal (Large)
12	Liner
11	Seal (Small)
10	Seal Guide
9	Body
8	Spindle
7	Joint
6	Seat
5	Disc
4	Disc Holder
3	Locknut
2	Joint
1	Bottom Cap
*Items shown in red contained in soft goods kit	
Item	Title

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:



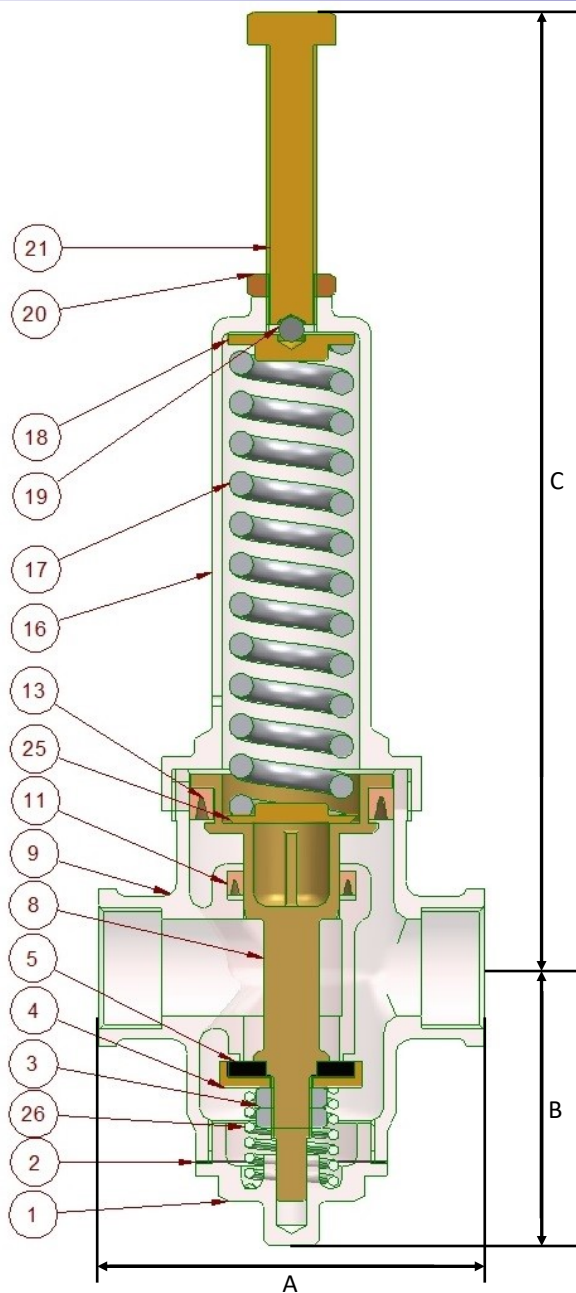
Size	A	B	C
125NB	380	270	840 (Max)
150NB	430	304	860 (Max)

Call Us on 01482 619600



Type D

Balanced Self Acting Pressure Regulator (Screwed)



Size	A	B	C
25NB	110	85	250
40NB	152	82	367
50NB	170	128	375

26	Load Spring
25	Spring Locator
21	Adjusting Screw
20	Locknut
19	Ball
18	Spring carrier
17	Spring
16	Dome
13	Seal (Large)
11	Seal (Small)
9	Body
8	Spindle
6	Seat
5	Disc
4	Disc Holder
3	Locknut
2	Joint
1	Bottom Cap
*Items shown in red contained in soft goods kit	
Item	Title

Please contact the Broady Flow Control sales team who will be happy to assist you in selecting the correct valve for your requirements.

Email: sales@broady.co.uk



BROADY

F L O W C O N T R O L

Broady

Quality



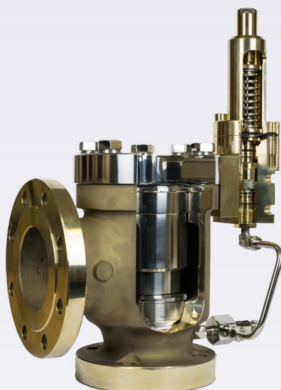
Broady Flow Control Limited, over its many years of trading, has developed into a highly efficient and customer focused organisation, well placed to satisfy the ever changing requirements of the industry. Renowned for innovation, flexibility and integrity.

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.

Call Us on 01482 619600



Valves from the Broady Product Range



3500 Series Pressure Safety Valves



Fire Fighting (Hydrant Valves)



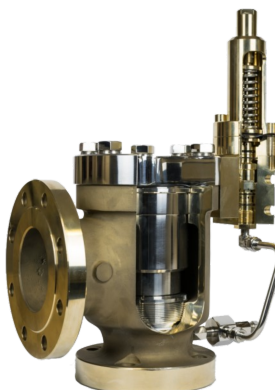
**Type 3600, 2600, 180 & 180-S
Safety Valves**



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



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



Type 4000 Pilot Operated Safety Relief Valve

Please Contact The
Broady Flow Control Sales
department for more
information on our
extensive product range.



BROADY

F L O W C O N T R O L



Engineering complete solutions

Broady Flow Control Limited
English Street
Kingston Upon Hull
East Yorkshire
HU32DU

Telephone: +44 (0) 01482 619600
Facsimile: +44 (0) 01482 619700
Email: Sales@broady.co.uk
Website: www.valvitalia.com

LinkedIn™



The information, specifications and technical data contained in this guide are subject to change without notice. The user should verify all technical data and specifications prior to use.

Broady Flow control does not warrant that the material and information contained herein is current and assumed no responsibility for the use or misuse of any such material and information by the user.

WARNING: The entire contents of the brochure are subject to the laws of copyright and intellectual property rights. Any infringement will be rigorously pursued.

Call Us on 01482 619600

Visit us at www.valvitalia.com