



## Full Lift Safety Relief Valves Dome Top or Test Lever - Screwed or Flanged Connections

### GRESSWELL SERIES 2000 FULL LIFT SAFETY RELIEF VALVES

These valves offer the very latest technology combined with the most economic use of materials available on the market.

They are used to prevent excess pressure build up in systems, by automatically opening and closing at pre-set pressures.

Being of the full lift design, maximum flow-rates and positive shut off is provided through a variety of soft and hard seating materials.

Available in bronze or stainless steel with optional test lever and viton soft seat.

### SIZE RANGE

DN	15 x 20	20 x 32	25 x 40	32 x 50
in	1/2" x 3/4"	3/4" x 1 1/4"	1" x 1 1/2"	1 1/4" x 2"

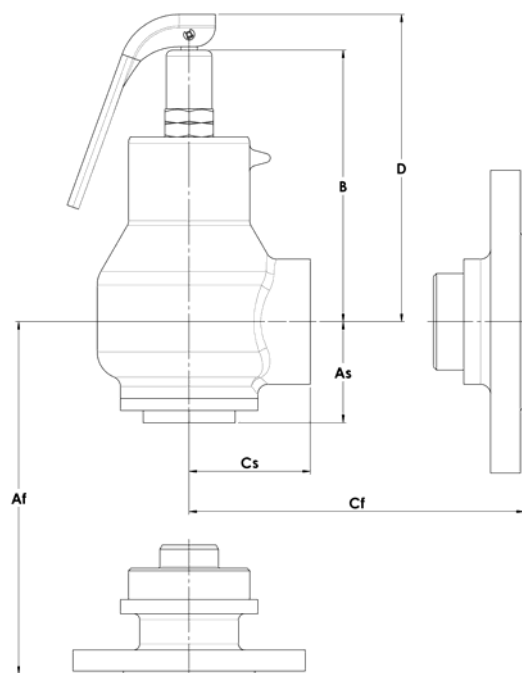
### PIPE CONNECTIONS

**INLET:** Threaded 'Rp' Parallel Female to BS 21/BS EN 10226/ISO 7

**OUTLET:** Threaded 'Rp' Parallel Female to BS 21/BS EN 10226/ISO 7

Alternative thread standards, e.g. 'Rc' x 'Rc' (BSPT) or ANSI B1.20.1 (NPT) are available upon request.

**FLANGED:** Most flange standards can be accommodated, e.g. BS EN 1759 (Class designated), BS EN 1092 (PN designated) or BS 10 (Table designated) - please specify.



### TESTING

All Gresswell Relief Valves are given a hydraulic seat tightness test before leaving the factory and the adjustment range is clearly marked.

All valves are supplied pre-set.

Flanged valves are pressure tested to ensure soundness of joints.

Special tests or witness testing can be arranged at extra cost.

### DIMENSION CHART

SIZE Inlet x outlet	As	Af	B	Cs	Cf	D	Weights (kgs)	
							Screwed	Flanged
15 x 20	32	75	121	40	67	145	1.1	1.7
20 x 32	44	75	132	55	82	156	1.6	2.6
25 x 40	48	76	139	60	90	163	2.6	3.3
32 x 50	64	100	250	70	116	295	7	12

All dimensions in millimetres (mm). Flange dimensions may vary according to specification (available upon request).

## FEATURES & BENEFITS

The Series 2000 range is a very efficient and cost effective automatic over-pressure protection device. The Series 2000 range is a Full Lift design and as such, the flow-rates are very high when compared to traditional Safety valves.

Gresswell Valves are quality assurance approved to BS EN ISO 9001: 2008. Certificate No. 0910407.

Manufactured in accordance with BS 6759 Parts 1, 2 & 3 and compliant with BS EN ISO 4126 Part 1 with full Cat IV PED approval.

Clear operating and maintenance instructions are supplied with each despatch.

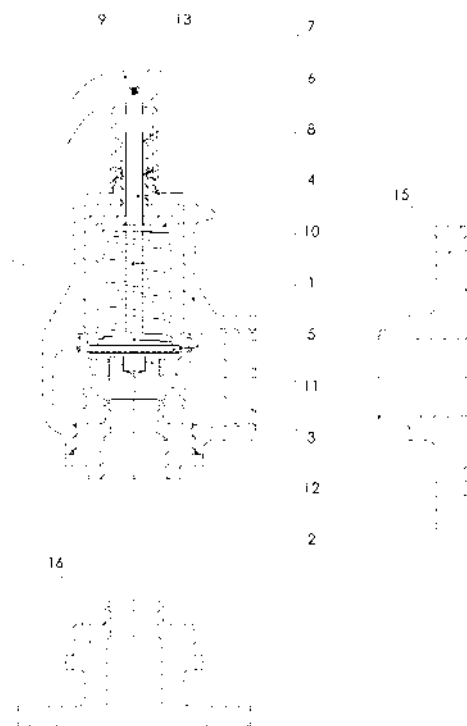
Screwed/Flanged or a combination of both are available as standard.

See separate Series 2000 leaflet for discharge capacities.

## PRESSURE & TEMPERATURE RANGE

Seat	Standard Pressure	High Pressure	Temp range
Metal	up to 12.4bar	-	-90° to +225°C
Viton	up to 12.4bar	12.4 - 27.6bar	-23° to +200°C

Valves in the high pressure range have reduced bores and flow rates are calculated accordingly



## BRONZE BODY SPECIFICATION

No.	Component	Material	No.	Component	Material
1	Body	Cu Alloy BS EN 1982 CC491K	9	Test Lever	St. Steel
2	Base	Cu Alloy BS EN 1982 CC491K	10	Spring	St. Steel BS2056 302 S26
3M	Metal Disc	Cu Alloy BS EN 1982 CC491K	11	Guide	Cu Alloy BS EN 1982 CC491K
3V	Viton Seat Insert	Viton 85 Black	12	'O' Ring	Viton
4	Spindle	Cu Alloy BS EN 12164 CW614N	13	Pin	St. Steel
5	Spring Plates	Cu Alloy BS EN 12164 CW614N	14	Cap Washer	PTFE
6	Adjusting Screw	Cu Alloy BS EN 12164 CW614N	15	Outlet Flange	Cu Alloy BS EN 1982 CC491K
7	Cap	Cu Alloy BS EN 12164 CW614N	16	Inlet Flange	Cu Alloy BS EN 1982 CC491K
7	Lock Nut	Cu Alloy BS EN 12164 CW614N			

## STAINLESS STEEL BODY SPECIFICATION

No.	Component	Material	No.	Component	Material
1	Body	St. Steel ASTM A351/A351M CF8M	9	Test Lever	St. Steel
2	Base	St. Steel ASTM A351/A351M CF8M	10	Spring	St. Steel BS2056 302 S26
3M	Metal Disc	St. Steel AISI 316 (DIN 1.4401)	11	Guide	Cu Alloy BS EN 1982 CC491K
3V	Viton Seat Insert	Viton 85 Black	12	'O' Ring	Viton
4	Spindle	St. Steel AISI 316 (DIN 1.4401)	13	Pin	St. Steel
5	Spring Plates	St. Steel AISI 316 (DIN 1.4401)	14	Cap Washer	PTFE
6	Adjusting Screw	St. Steel AISI 316 (DIN 1.4401)	15	Outlet Flange	St. Steel AISI 316L (DIN 1.4404)
7	Cap	St. Steel AISI 316 (DIN 1.4401)	16	Inlet Flange	St. Steel AISI 316L (DIN 1.4404)
7	Lock Nut	St. Steel AISI 316 (DIN 1.4401)			



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**HOSE & COUPLINGS DIVISION**





## Full Lift Safety Relief Valves

### Dome Top or Test Lever - Screwed or Flanged Connections

#### GRESSWELL SERIES 2000 DN40 & DN50 FULL LIFT SAFETY RELIEF VALVES

These valves offer the very latest technology combined with the most economic use of materials available on the market.

They are used to prevent excess pressure build up in systems, by automatically opening and closing at pre-set pressures.

Being of the full lift design, maximum flow-rates and positive shut off is provided through a variety of soft and hard seating materials.

Available in bronze or with stainless steel trim and with optional test lever and/or viton soft seat.

#### PIPE CONNECTIONS

INLET: Threaded 'Rp' Parallel Female to BS 21/BS EN 10226/ISO 7

OUTLET: Threaded 'Rp' Parallel Female to BS 21/BS EN 10226/ISO 7

Alternative thread standards, e.g. 'Rc' x 'Rc' (BSPT) or ANSI B1.20.1 (NPT) are available upon request.

FLANGED: Most flange standards can be accommodated, e.g. BS EN 1759 (Class designated), BS EN 1092 (PN designated) or BS 10 (Table designated) - please specify.

#### TESTING

All Gresswell Relief Valves are given a hydraulic seat tightness test before leaving the factory and the adjustment range is clearly marked.

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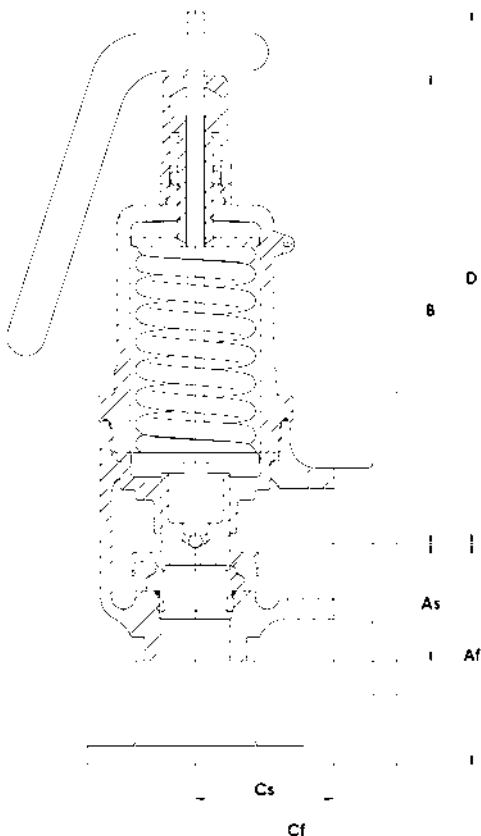
#### DIMENSION CHART

SIZE Inlet x outlet	As	Af	B	Cs	Cf	D	Weights (kgs)	
							Screwed	Flanged
40 x 65	67	130	270	81	118	313	11.4	15
50 x 80	80	158	307	96	158	350	17.5	22

All dimensions in millimetres (mm). Flange dimensions may vary according to specification (available upon request).

#### SIZE RANGE

DN	40 x 65	50 x 80
in	1½" x 2½"	2" x 3"



## FEATURES & BENEFITS

The Series 2000 range is a very efficient and cost effective automatic over-pressure protection device. The Series 2000 range is a Full Lift design and as such, the flow-rates are very high when compared to traditional Safety valves.

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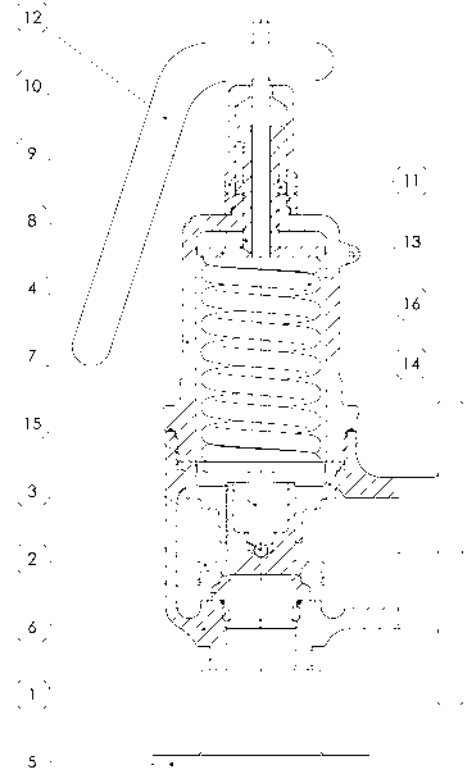
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See separate Series 2000 leaflet for discharge capacities.

## PRESSURE & TEMPERATURE RANGE

Seat	Standard Pressure	High Pressure	Temp range
Metal	up to 12.4bar	-	-90° to +225°C
Viton	up to 12.4bar	12.4 - 27.6bar	-23° to +200°C

Valves in the high pressure range have reduced bores and flow rates are calculated accordingly



## STANDARD SPECIFICATION

No.	Component	Material	No.	Component	Material
1	Body	Cu Alloy BS EN 1982 CC491K	9	Adjusting Screw	Cu Alloy BS EN 12164 CW614N
2	Nozzle	Cu Alloy BS EN 1982 CC491K	10	Cap	Cu Alloy BS EN 12164 CW614N
3M	Metal Disc	Cu Alloy BS EN 1982 CC491K	11	Lock Nut	Cu Alloy BS EN 12164 CW614N
3SS	St.St Disc	St. Steel AISI 316 (DIN 1.4401)	12	Lifting Lever	Mild Steel
3V	Viton Disc Insert	Viton 85 Black	13	Spring	St. Steel BS2056 302 S26
4	Bonnet	Cu Alloy BS EN 1982 CC491K	14	Guide	Cu Alloy BS EN 1982 CC491K
5	Flanges	Integral with body	15	Ball	St. Steel AISI 420
6	Seat 'O' Ring	Viton	16	'O' Ring	Viton
7	Spindle	Cu Alloy BS EN 12164 CW614N			
8	Spring Plates	Cu Alloy BS EN 1982 CC491K			



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