



Bronze Relief Valves Test Lever - Screwed or Flanged Connections

Order Ref: **Metal Seat:** **G90-M-DN-X**
 TFM Seat: **G90-T-DN-X**
 Viton Seat: **G90-V-DN-X**
 Silicon Seat: **G90-SI-DN-X**

DN = Size in mm

X = Spring Range (see Chart Over)

GRESSWELL G90 RELIEF VALVES

Side Outlet discharge with test lever. These valves are commonly used for preventing a safe pressure being exceeded in pressurised systems.

The lift is proportional to the system overpressure.

SIZE RANGE

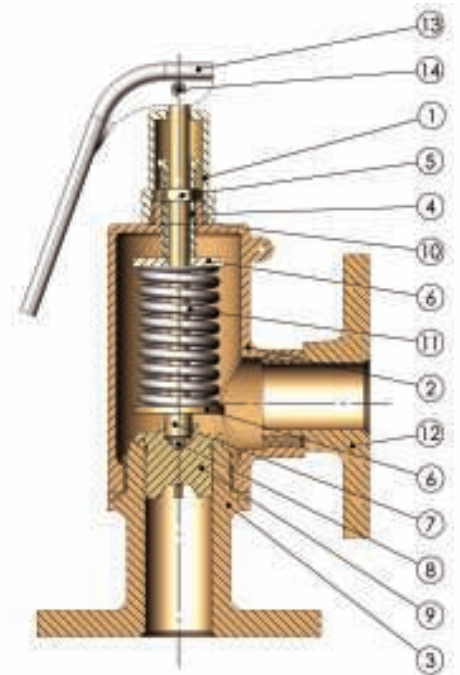
| mm | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 |
|-----|-----|-----|----|-------|-------|----|-------|----|
| ins | 1/2 | 3/4 | 1 | 1 1/4 | 1 1/2 | 2 | 2 1/2 | 3 |

PIPE CONNECTIONS

Male Inlet x Female Outlet.

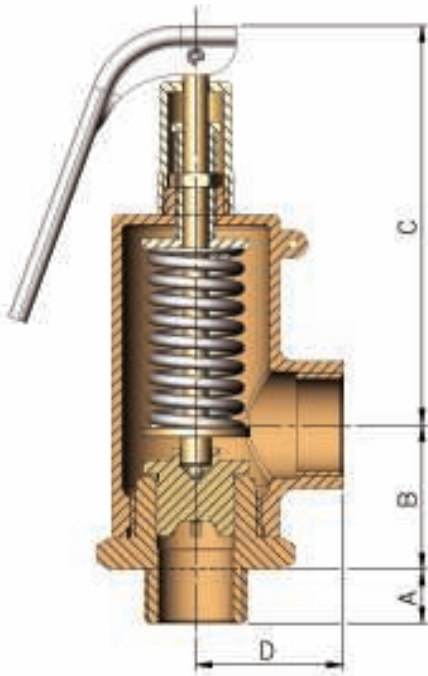
Standard valves are threaded BS 21:1985 Rp Parallel. Alternative thread standards, i.e. taper or NPT are available upon request.

Flanged connections also available. Most flange standards can be accommodated, e.g. ANSI, BS4504 - please specify requirements.



STANDARD SPECIFICATION

| No. | Component | Material | No. | Component | Material |
|-----|-------------------|-----------------------------|-----|------------------|-----------------------------|
| 1 | Dome Top | Cu Alloy BS EN 12164 CW617N | 7 | Spindle | Cu Alloy BS EN 12164 CW721R |
| 2 | Body | Cu Alloy BS EN 1982 CC491K | 8 | Ball | Chrome Steel AISA 52100 |
| 3 | Base (Metal Seat) | Cu Alloy BS EN 1982 CC491K | 9 | Valve | Cu Alloy BS EN 12165 CW602N |
| 3T | TFM Seat | Dyneon™ TFM™ PTFE 1600 | 10 | Label | Metallised Polymer |
| 3V | Viton Seat | Viton 85 Brown | 11 | Spring 15 - 50mm | St. Steel BS2056 302 S26 |
| 3S | Silicone Seat | Silicone 50 Blue | | Spring 65 & 80mm | Carbon Steel BS5216 ND3 |
| 3FL | Flanged Inlet | Cu Alloy BS EN 1982 CC491K | 12 | Flanged Outlet | FCu Alloy BS EN 1982 CC491K |
| 4 | Adjusting Screw | Cu Alloy BS EN 12164 CW641N | 13 | Lever | Stainless Steel |
| 5 | Lock Nut | Cu Alloy BS EN 12164 CW641N | 14 | Lever Pin | Stainless Steel |
| 6 | Spring Plate | Cu Alloy BS EN 12164 CW721R | | | |



FEATURES & BENEFITS

Gresswell Valves are quality assurance approved to BS EN ISO 9001: 2000. Certificate No. 0910407.

Full Cat IV PED approval.

Only 4 springs are needed to cover the full pressure range.

Clear operating and maintenance instructions are supplied with each despatch.

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

See leaflet Ref: DC G55 & G90 for Discharge Capacities.

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 | A | B | C | D | Weight (kg) |
|-------------|----|----|-----|----|-------------|
| DN15 | 16 | 35 | 104 | 34 | 0.6 |
| DN20 | 16 | 36 | 114 | 40 | 0.8 |
| DN25 | 17 | 47 | 130 | 48 | 1.5 |
| DN32 | 23 | 51 | 155 | 51 | 2.0 |
| DN40 | 24 | 51 | 155 | 56 | 2.6 |
| DN50 | 27 | 60 | 144 | 62 | 3.5 |
| DN65 | 28 | 87 | 167 | 78 | 6.9 |
| DN80 | 28 | 94 | 181 | 83 | 9.0 |

All dimensions in millimetres (mm)

Flange dimensions (available upon request) vary according to specification

SEAT TYPES - SPRING/PRESSURE RANGES

| Seat Housing | Valve | Pressure Range | Temperature Range | Spring Range (bar & p.s.i.) | | | |
|----------------------|--------|--------------------------|-------------------|-----------------------------|-----------------------|-------------------------|-------------------------|
| | | | | A (Low) | B (Medium) | C (High) | D (Special*) |
| Bronze | Bronze | to 21.0 bar (300 p.s.i.) | -15° to +225°C | 0.2 - 3.5 (0 - 50) | 3.5 - 10.5 (50 - 150) | 10.5 - 21.0 (150 - 300) | N/A |
| Bronze TFM insert | Bronze | to 21.0 bar (300 p.s.i.) | -15° to +225°C | 0.2 - 2.0 (0 - 30) | 2.0 - 8.3 (30 - 120) | 8.3 - 16.6 (120 - 260) | 16.6 - 21.0 (260 - 300) |
| Bronze VITON seal† | Bronze | to 21.0 bar (300 p.s.i.) | -15° to +200°C | 0.2 - 2.0 (0 - 30) | 2.0 - 8.3 (30 - 120) | 8.3 - 16.6 (120 - 260) | 16.6 - 21.0 (260 - 300) |
| Bronze Silicon seal† | Bronze | to 21.0 bar (300 p.s.i.) | -15° to +180°C | 0.2 - 2.0 (0 - 30) | 2.0 - 8.3 (30 - 120) | 8.3 - 16.6 (120 - 260) | 16.6 - 21.0 (260 - 300) |

* 32mm and 50mm only available for special orders, 65mm and 80mm not available.

† 65mm and 80mm not available.



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



UK Office

Keison Products,

P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.

Tel: +44 (0)1245 600560

Fax: +44 (0)1245 600030

Email: sales@keison.co.uk

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.