

The Waverley brownall Manifold range of Precision Relief Valves and Strainers are manufactured to a very high standard in our own UK factory from top quality 316 stainless steel. Both products have a safe working pressure of 6000 psi and come in a wide range of inlet and outlet end connections from 1/8" to 1" in a variety of thread forms, including Ringlok and Duoloc compression ends.

The Relief Valve design features a range of colour coded springs to give the user the flexibility of choosing the relief pressure to exactly suit your application. The strainer or Inline Tee Filter is designed for liquid or gas applications and can be ordered with a wide range of different mesh or sintered size elements.



### Operation

When inline pressure exceeds the force exerted by the spring, the valve stem opens. The flow through the valve is proportional to the increase in pressure. As the valve is balanced, cracking pressure is not effected by outlet back pressure. The relief valve setting is adjusted by rotating the adjustment cap.

### Features

Maximum working pressure 6000psi

Cracking pressures from 100 to 6000psi

All 316 Stainless Steel construction with choice of seals

Range of end connections available including Double and Single ferrule OD Compression, BSP, BSPT, NPT



## Technical specifications

### Temperature ratings

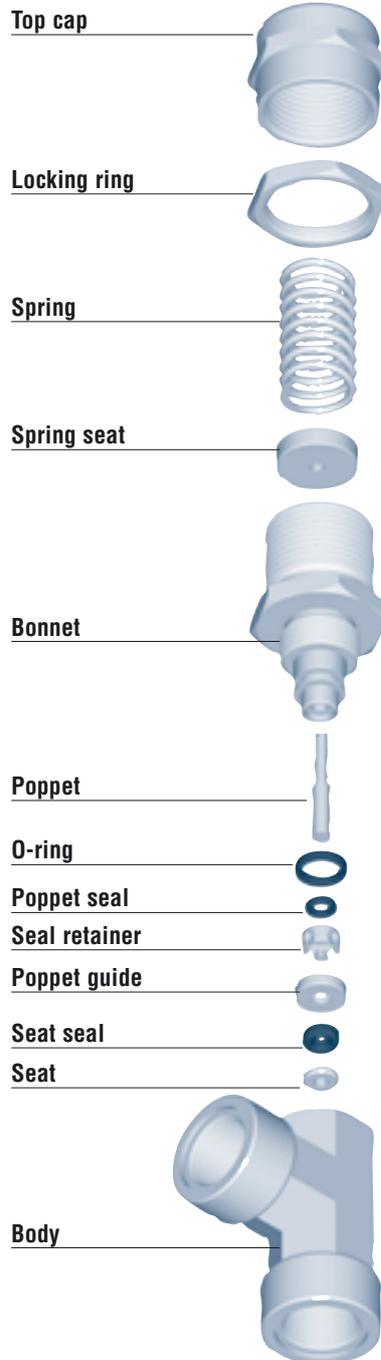
Temperature range Viton	-20 to 200°C
Temperature range High Nitrile	-40 to 120°C
Cracking pressure	Adjustable from 100 to 6000psi
Maximum working pressure	6000psi
Outlet maximum working pressure	1500psi

### Materials of construction

Top cap	316 stainless steel
Locking ring	316 stainless steel
Spring	316 stainless steel
Spring seat	316 stainless steel
Bonnet	316 stainless steel
O-ring	High Nitrile
Poppet seal	High Nitrile
Seal retainer	316 stainless steel
Poppet	316 stainless steel
Poppet guide	316 stainless steel
Seat seal High Nitrile	
Seat	316 stainless steel
Body	316 stainless steel

### Spring selection chart

	PSI	Bar	Colour	Part
A	100-500	3.4-34	Yellow	PRV13
B	500-1000	34-68	Purple	PRV14
C	1000-2000	68-136	Orange	PRV15
D	2000-3000	136-204	Brown	PRV16
E	3000-4000	204-272	White	PRV17
F	4000-5000	272-340	Red	PRV18
G	5000-6000	340-408	Green	PRV19



### Cracking pressure

The cracking pressure on valves that have not been used for long periods of time may be above the set pressure.

### Pre-set pressure

Valves ordered as standard will not have a pre-set relief setting. Relief valves may be pre-set to order.

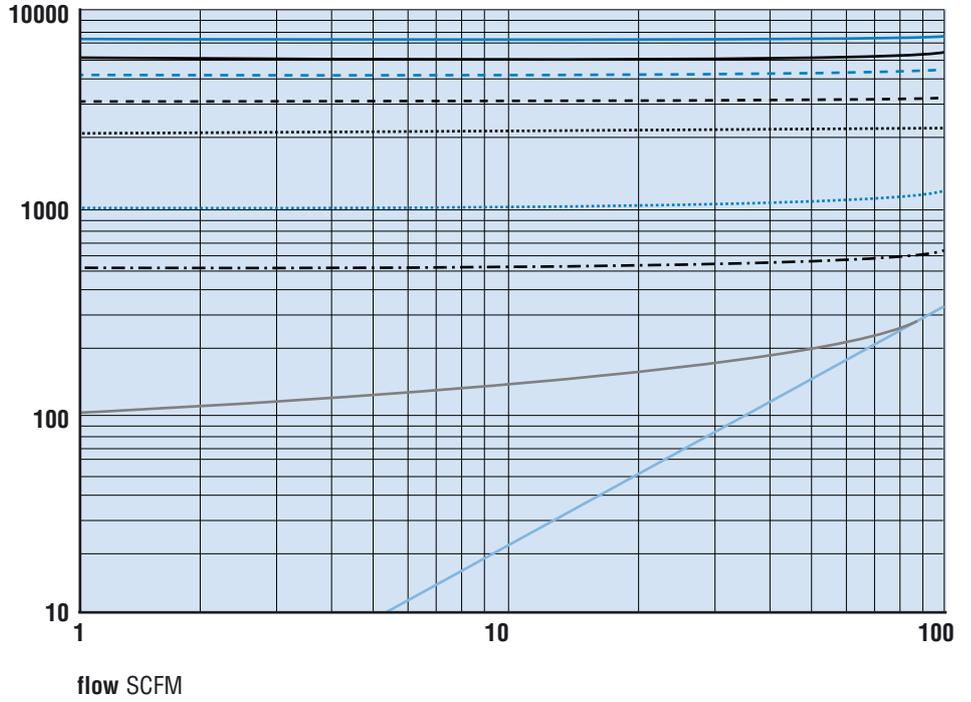
### Testing

Each valve is individually tested for pressure relief operation and sealing performance based on BS 6755 P1.

## Air flow

- Cv = 0.42
- A set at 100psi
- A set at 500psi
- ..... B set at 1000psi
- ..... C set at 2000psi
- - - D set at 3000psi
- - - E set at 4000psi
- F set at 5000psi
- G set at 6000psi

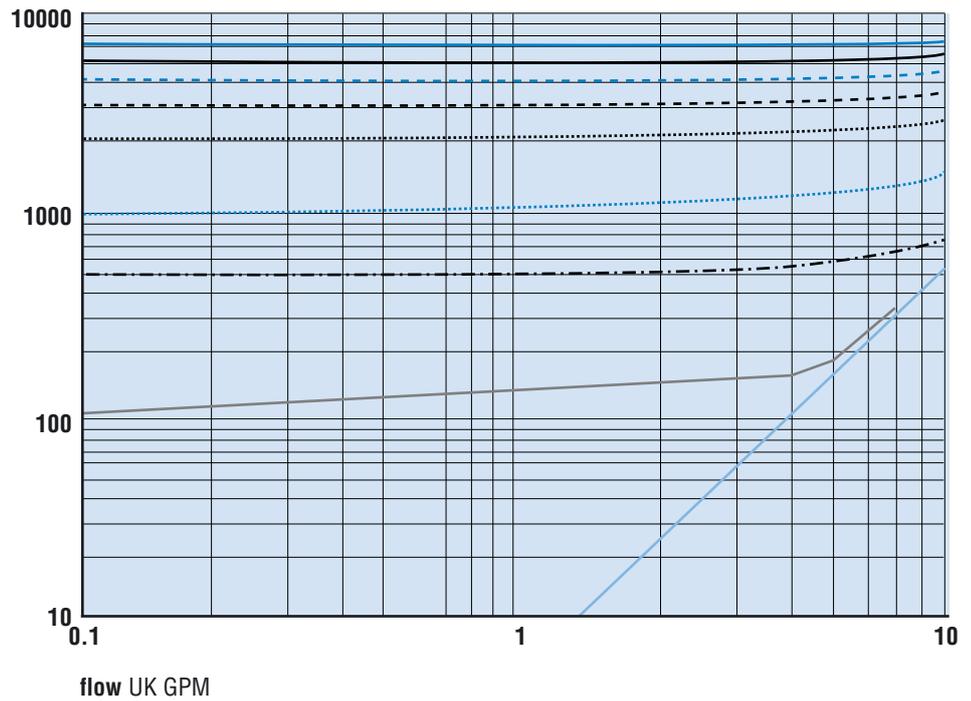
inlet  
pressure  
psi



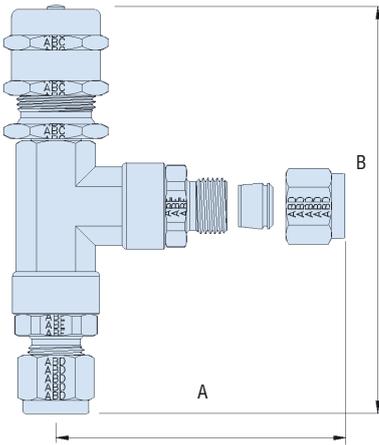
## Water flow

- Cv = 0.42
- A set at 100psi
- A set at 500psi
- ..... B set at 1000psi
- ..... C set at 2000psi
- - - D set at 3000psi
- - - E set at 4000psi
- F set at 5000psi
- G set at 6000psi

inlet  
pressure  
psi

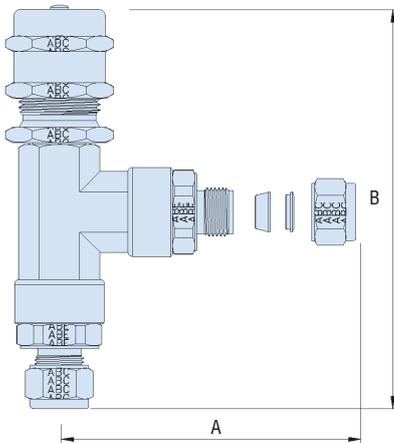


## Duoloc® single ferrule OD compression



thread size	part number	A	B
1/8" O/D	PRV/10D	1.826"	4.700"
3/16" O/D	PRV/3/16OD	1.826"	4.700"
1/4" O/D	PRV/20D	1.826"	4.700"
3/8" O/D	PRV/30D	1.858"	4.732"
1/2" O/D	PRV/40D	1.857"	4.731"
6MM O/D	PRV/6MOD	47mm	165mm
8MM O/D	PRV/8MOD	46mm	164mm
10MM O/D	PRV/10MOD	46mm	165mm
12MM O/D	PRV/12MOD	46mm	165mm

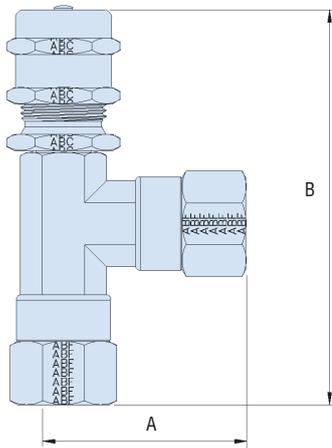
## Ringlok® double ferrule OD compression



thread size	part number	A	B
1/8" O/D	PRV=10D	1.806"	4.680"
3/16" O/D	PRV=3/16OD	1.806"	4.680"
1/4" O/D	PRV=20D	1.808"	4.682"
3/8" O/D	PRV=30D	1.857"	4.731"
1/2" O/D	PRV=40D	1.744"	4.618"
6MM O/D	PRV=6MOD	45mm	163mm
8MM O/D	PRV=8MOD	46mm	164mm
10MM O/D	PRV=10MOD	45mm	163mm
12MM O/D	PRV=12MOD	43mm	159mm

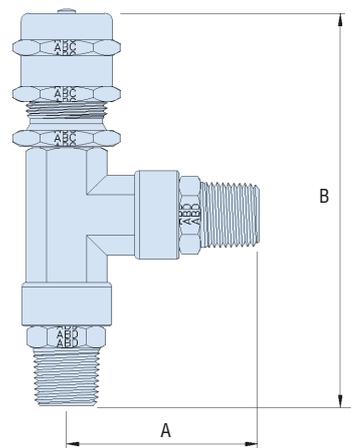
Please state opening pressure or spring requirement when ordering.

## Female/female



thread size	part number	A	B
G 1/4" BSP	PRV/2P	2.236"	5.110"
G 3/8" BSP	PRV/3P	2.416"	5.290"
G 1/2" BSP	PRV/4P	2.553"	5.427"
Rc 1/4" BSPT	PRV/2T	2.306"	5.180"
Rc 3/8" BSPT	PRV/3T	2.416"	5.290"
Rc 1/2" BSPT	PRV/4T	2.551"	5.425"
1/4" NPTF	PRV/2N	2.306"	5.180"
3/8" NPTF	PRV/3N	2.416"	5.290"
1/2" NPTF	PRV/4N	2.551"	5.425"

## Male/male



thread size	part number	A	B
G 1/4" BSP	PRV/2P/M	2.156"	5.030"
G 3/8" BSP	PRV/3P/M	2.236"	5.110"
G 1/2" BSP	PRV/4P/M	2.306"	5.180"
Rc 1/4" BSPT	PRV/2T/M	2.206"	5.080"
Rc 3/8" BSPT	PRV/3T/M	2.269"	5.143"
Rc 1/2" BSPT	PRV/4T/M	2.581"	5.455"
1/4" NPTF	PRV/2N/M	2.206"	5.080"
3/8" NPTF	PRV/3N/M	2.269"	5.143"
1/2" NPTF	PRV/4N/M	2.394"	5.268"

Please state opening pressure or spring requirement when ordering.