

The Waverley brownall range of stainless steel check valves is one of the most comprehensive in the World.

Our standard valve is the CV series which is designed to give unidirectional flow control of liquids and gases with a minimal pressure drop. It is a general purpose poppet type check valve for flow control up to pressures of 3000 psi. The CV series is available in a wide range of inlet and outlet port connections from  $\frac{1}{4}$ " to  $1\frac{1}{2}$ ".

The Waverley brownall mini valve is the MCV and ACV series which are miniature, compact one piece body check valves for unidirectional control of flow up to pressures of 6000 psi. The MCV is our standard pre-set Mini valve while the ACV series valve comes with an adjustable spring to give a variable cracking pressure.



## Benefits, applications and design features

### Features

- Robust design
- Poppet mounted seal
- Choice of PTFE or Viton seals
- Variety of cracking pressures
- Minimal pressure drop
- Bubble tight shut off

### Applications

- Prevents reverse flow
- Low pressure relief valve
- Locks upstream pressure
- Up to 3,000psi
- Liquid or vapour service

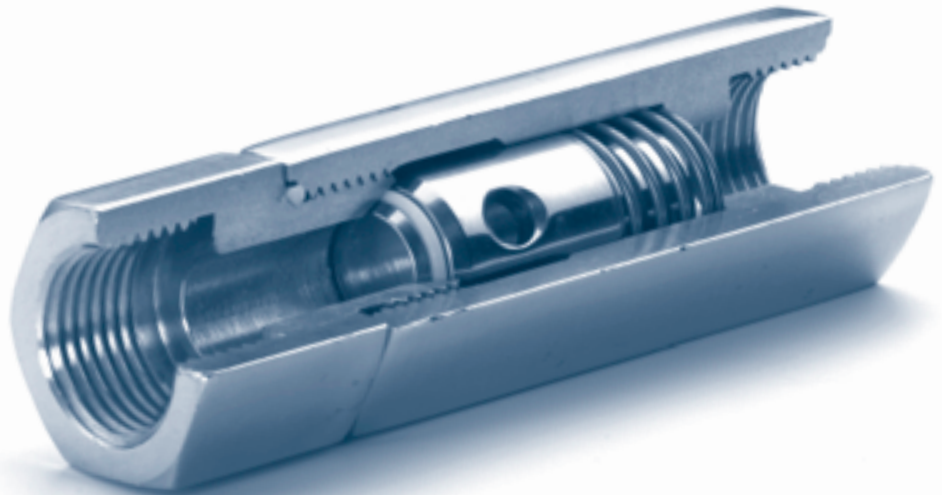
### Benefit

**Body** precision machined from 316 Stainless Steel incorporating male female threaded connections, Duoloc® and Ringlok® compression ends.

**Poppet** machined from 316 stainless steel incorporating PTFE or Viton seal.

**Choice of springs** for a range of preset cracking pressures.

**Endcap** manufactured from 316 stainless steel, with precision machined cone for bubble tight shut off (PTFE or Viton seal).



## Technical specifications

### Technical specifications

Pressure range	0-3000psi
Temperature range PTFE	-45 to 230°C
Temperature range Viton	-23 to 200°C
Nominal cracking pressure	5,15,25,30,45psi
Others on request	
CV rating valve size	CV
1/4"	0.65
3/8"	0.65
1/2"	1.92
3/4"	6.10
1"	6.60

### Materials of construction

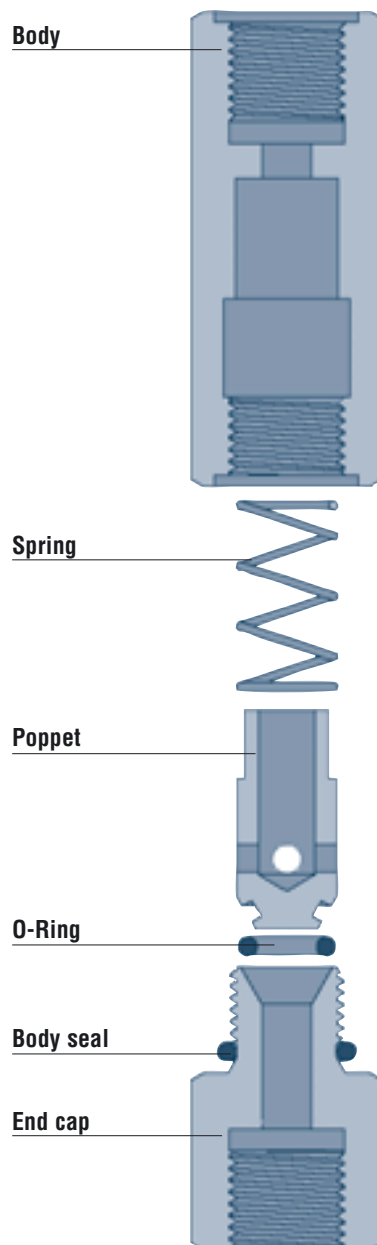
Body	316 stainless steel
Spring	316 stainless steel
Poppet	316 stainless steel
O-Ring	PTFE/Viton
End cap	316 stainless steel
Body seal	PTFE/Viton

### Valve connections

NPT	ANSI/ASME B1-20.1
BSPT	BS21
BSP	BS2779

### Valve markings

Make or manufacturer	Waverley
Direction arrow	
Pressure rating	3000 psi
Cast code	ABC



### Testing

Waverley check valves have been tested for sealing performance based on BS 6755 Pt1. These tests consist of: Low pressure (50psi 3.5 bar)  
High pressure shell (4,500psi 310 Bar)

### Seal kits

Seal kits are supplied for necessary maintenance. These consist of poppet and end-cap seals and a new spring.

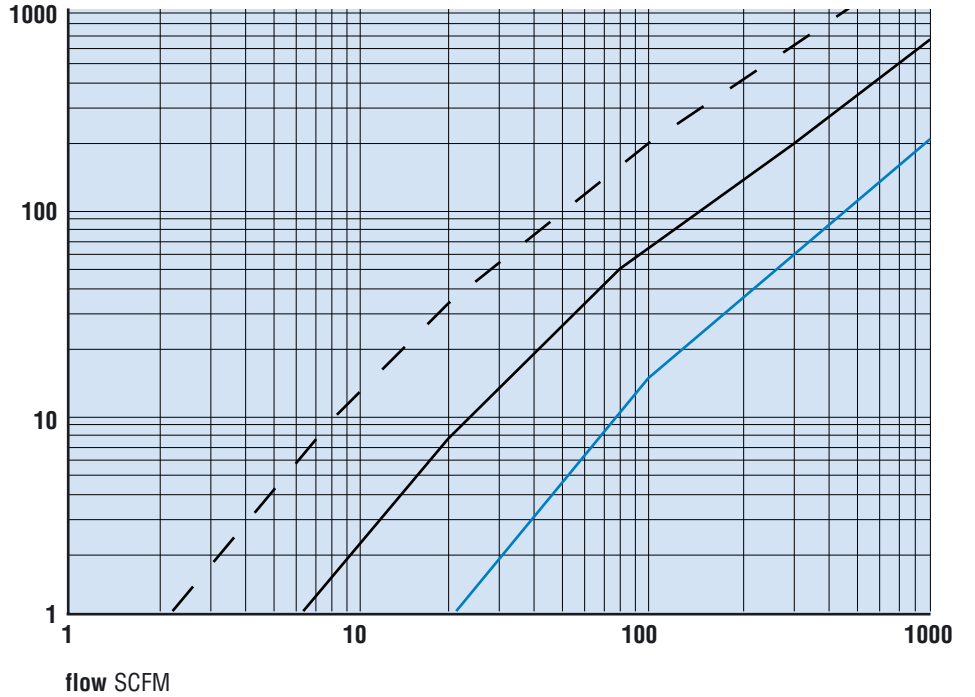
### Cleaning and packaging

All check valves are dispatched fully degreased and sealed. Cleaning for oxygen use on application.

## Air flow

- 1/4", 3/8"
- 1/2"
- 3/4", 1"

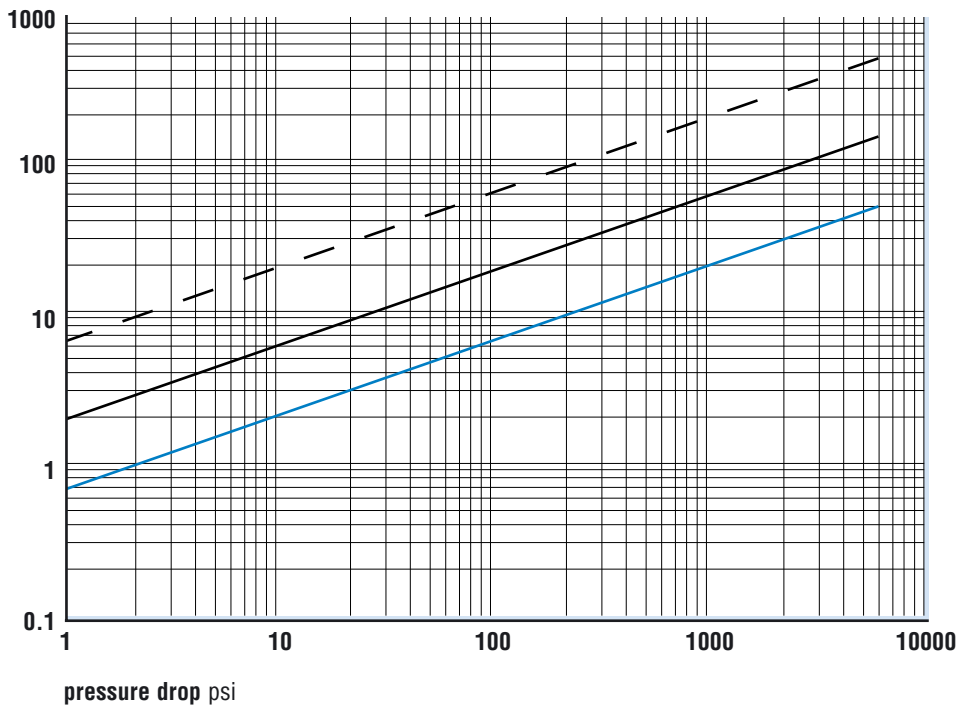
pressure drop psi



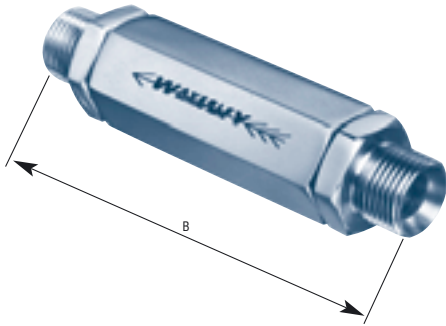
## Water flow

- 1/4", 3/8"
- 1/2"
- 3/4", 1"

flow GPM

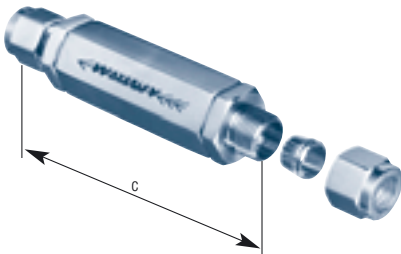


## Male/male



thread size	part number	B	hex A/F
1/8" BSP	CV1P M/M	3.395"	0.750"
1/4" BSP	CV2P M/M	3.525"	0.750"
3/8" BSP	CV3P M/M	4.135"	0.875"
1/2" BSP	CV4P M/M	5.000"	1.125"
3/4" BSP	CV6P M/M	6.795"	1.670"
1" BSP	CV8P M/M	6.895"	1.670"
1/4" BSPT	CV2T M/M	3.625"	0.750"
3/8" BSPT	CV3T M/M	4.187"	0.875"
1/2" BSPT	CV4T M/M	5.100"	1.125"
3/4" BSPT	CV6T M/M	6.795"	1.670"
1" BSPT	CV8T M/M	7.050"	1.670"
1/4" NPT	CV2N M/M	3.625"	0.750"
3/8" NPT	CV3N M/M	4.187"	0.875"
1/2" NPT	CV4N M/M	5.100"	1.125"
3/4" NPT	CV6N M/M	6.795"	1.670"
1" NPT	CV8N M/M	7.050"	1.670"

## Duoloc® single ferrule OD compression



tube OD	part number	C	hex A/F
1/8"	CV1 OD	2.865"	0.750"
3/16"	CV3/16 OD	2.865"	0.750"
1/4"	CV2 OD	2.865"	0.750"
3/8"	CV3 OD	3.429"	0.875"
1/2"	CV4 OD	4.022"	1.125"
3/4"	CV6 OD	5.636"	1.670"
1"	CV8 OD	5.740"	1.670"
6mm	CV6M OD	75.5mm	19.0mm
8mm	CV8M OD	84.0mm	22.0mm
10mm	CV10M OD	88.0mm	28.5mm
12mm	CV12M OD	100.0mm	28.5mm
15mm	CV15M OD	103.0mm	28.5mm
16mm	CV16M OD	101.0mm	28.5mm
18mm	CV18M OD	106.0mm	28.5mm
20mm	CV20M OD	145.0mm	42.0mm
22mm	CV22M OD	145.0mm	42.0mm
25mm	CV25M OD	145.0mm	42.0mm