

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

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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

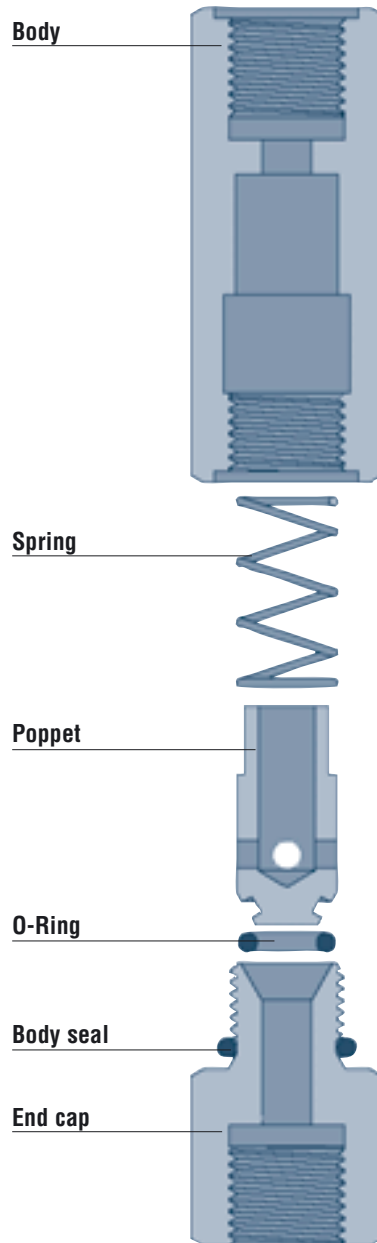
Body	316 stainless steel
Spring	316 stainless steel
Poppet	316 stainless steel
O-Ring	PTFE/Viton
End cap	316 stainless steel
Body seal	PTFE/Viton

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.

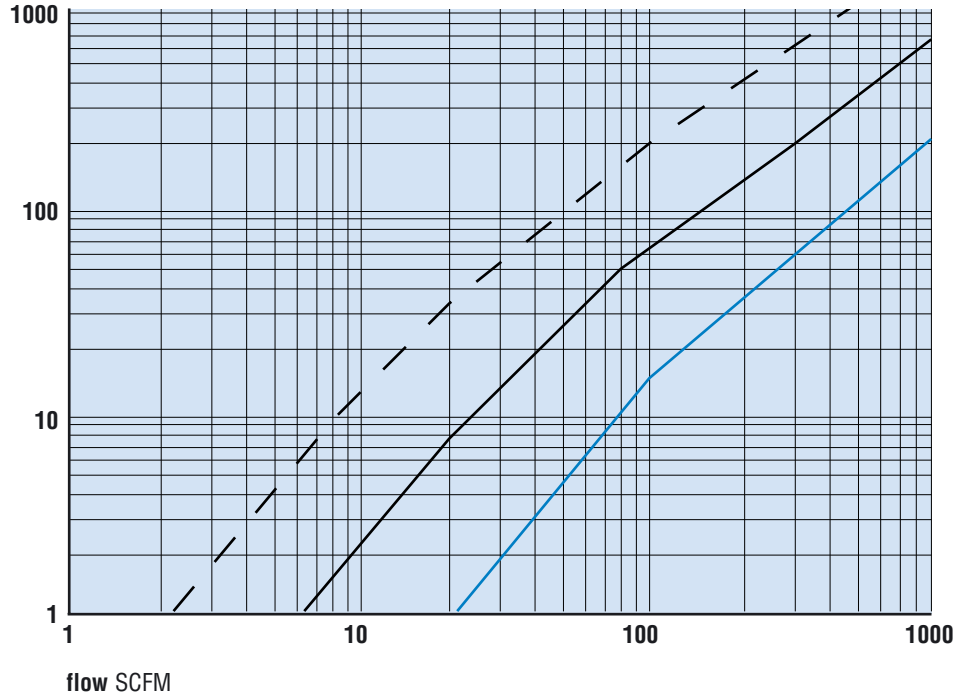
Cleaning and packaging

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"

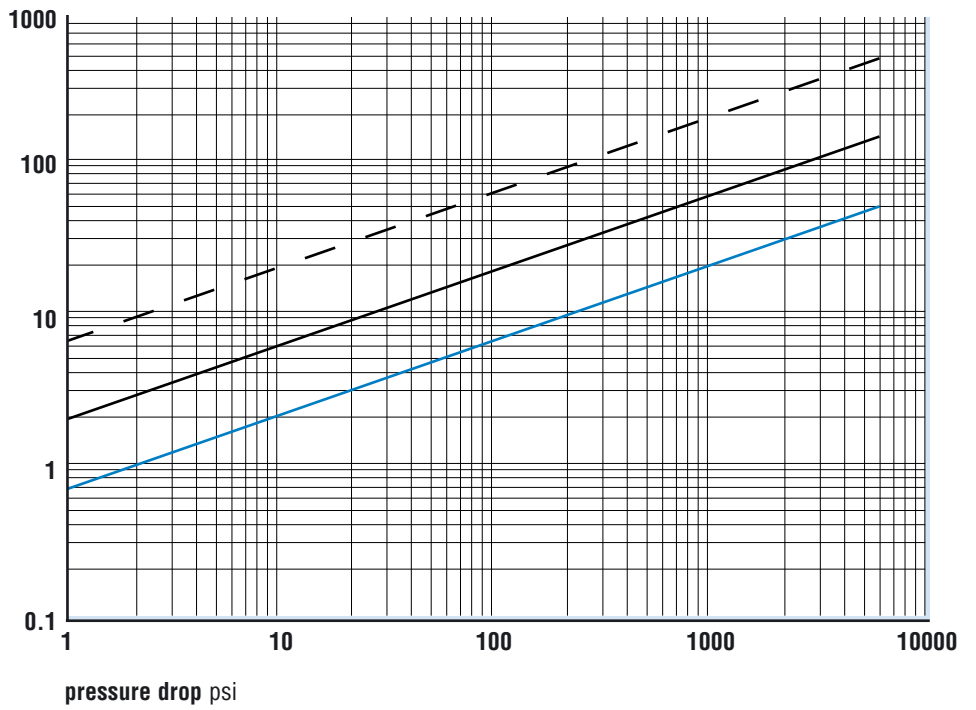
pressure drop psi



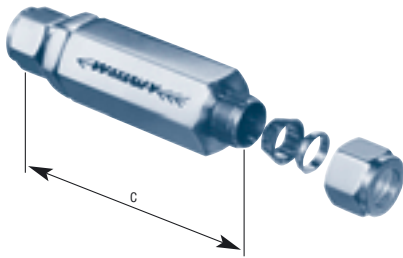
Water flow

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

flow GPM



Ringlok® double ferrule OD compression



tube OD	part number	C	hex A/F
1/8"	CV1=OD	2.825"	0.750"
3/16"	CV3/16=OD	2.825"	0.750"
1/4"	CV2=OD	2.829"	0.750"
3/8"	CV3=OD	3.327"	0.875"
1/2"	CV4=OD	3.676"	1.125"
3/4"	CV6=OD	5.100"	1.670"
1"	CV8=OD	4.920"	1.670"
6mm	CV6M=OD	71.0mm	19.0mm
8mm	CV8M=OD	85.0mm	22.0mm
10mm	CV10M=OD	85.0mm	28.5mm
12mm	CV12M=OD	93.0mm	28.5mm
15mm	CV15M=OD	91.0mm	28.5mm
16mm	CV16M=OD	91.0mm	28.5mm
18mm	CV18M=OD	94.0mm	28.5mm
20mm	CV20M=OD	128.5mm	42.0mm
22mm	CV22M=OD	128.5mm	42.0mm
25mm	CV25M=OD	127.0mm	42.0mm

Replacement seal kits comprising of two seals and spring

valve size	part number
1/4"	CV2 SEALS
3/8"	CV3 SEALS
1/2"	CV4 SEALS
3/4"	CV6 SEALS
1"	CV8 SEALS