

### Benefits, applications and design features

#### Features

- 90° fast actuation
- Low operating torque
- Compact one piece design
- Bi-directional flow
- Replaceable seats
- Temperature rating -45 – 230°C
- Up to 1,000psi
- Colour coded handle
- Anti blow out spindle

#### Applications

- Low pressure shut off
- Drain valve
- Compressed air service
- liquid or vapour service

#### Benefit

PVC sleeve colour coded for pressure rating 1000psi - Red

**Handle** pressed from 304 Stainless Steel for corrosion resistance and long life with 90° positive stop.

Lockable handles or pneumatically operated actuators can be supplied fully assembled, with the Waverley brownall 1000 class valve range.

**One piece anti-blow out spindle** incorporated into the design ensuring safety and seal integrity. An anti-vibration nyloc nut is incorporated on the spindle

**Body** manufactured from hexagon bar stock in 316 stainless steel as standard.

**Ball** is manufactured from 316 stainless steel to give material continuity throughout the valve.

It is of a floating ball arrangement, which compensates for seat wear and fluctuations in pressure and temperature.

**BV 1000 seats** are manufactured from PTFE and are easily renewable.



## Technical specifications

### Technical specifications

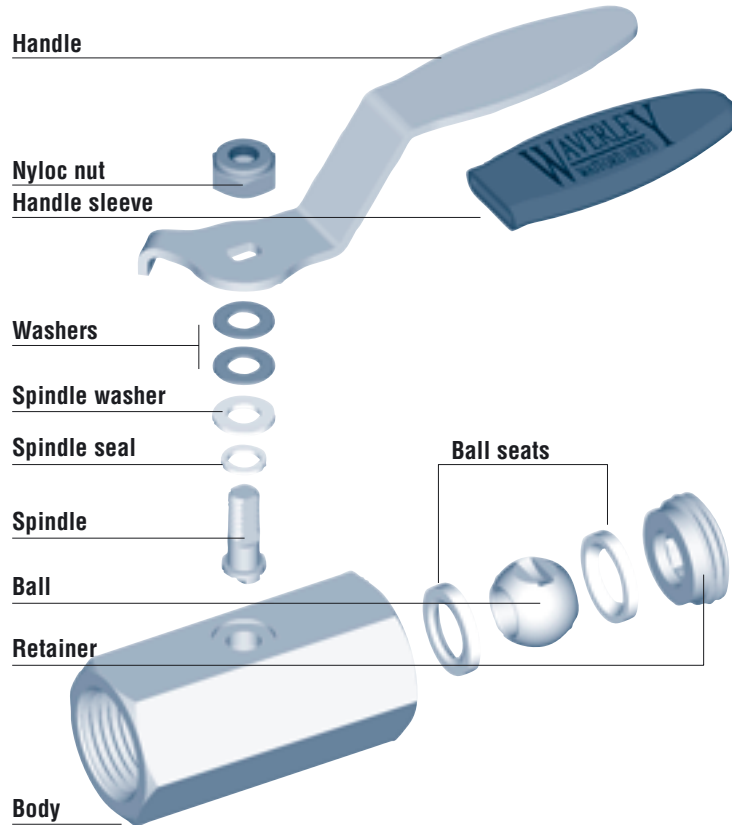
Pressure range	0-1000psi	
Temperature range	-45 to 230°C	
Cv rating (ball orifice diameter)		
Valve size	Cv	Orifice
1/4"	0.72	(0.375")
3/8"	2.30	(0.375")
1/2"	3.00	(0.375")
3/4"	6.30	(0.600")
1"	9.00	(0.600")

### Materials of construction

Body	316 stainless steel
Ball	316 stainless steel
Spindle	316 stainless steel
Spindle seal	PTFE glass filled
Spindle washer	PTFE
Retainer	316 stainless steel
Handle	304 stainless steel
Belleville washer	316 stainless steel
Nyloc nut	316 stainless steel
Handle sleeve	PVC
Ball seats	PTFE

### Valve markings

Make or manufacturer	Waverley
Pressure rating	1000psi
Cast code	ABC123



### Testing

All Waverley ball valves are 100% tested for sealing performance based on BS 6755 Pt1. These tests consist of: Low pressure (50 psi 3.5 bar) High pressure shell (1,500psi 103.5 Bar)

### Seal kits

Seal kits are supplied for necessary maintenance. These consist of ball seats and spindle seals.

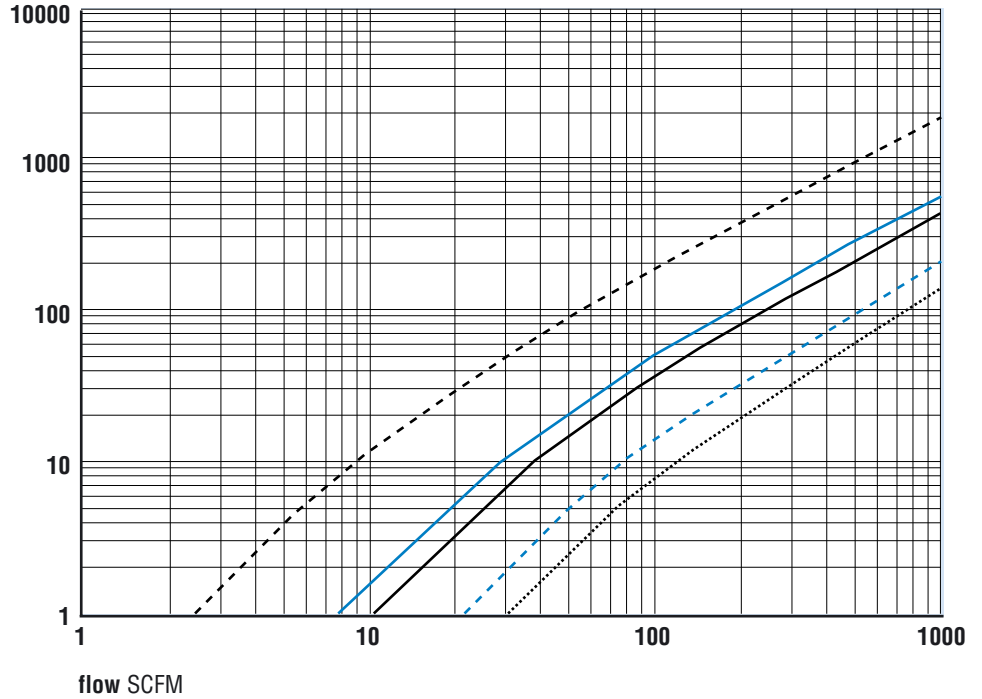
### Cleaning and packaging

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

### Air flow

- 1/4" valve
- 3/8" valve
- 1/2" valve
- - 3/4" valve
- ..... 1" valve

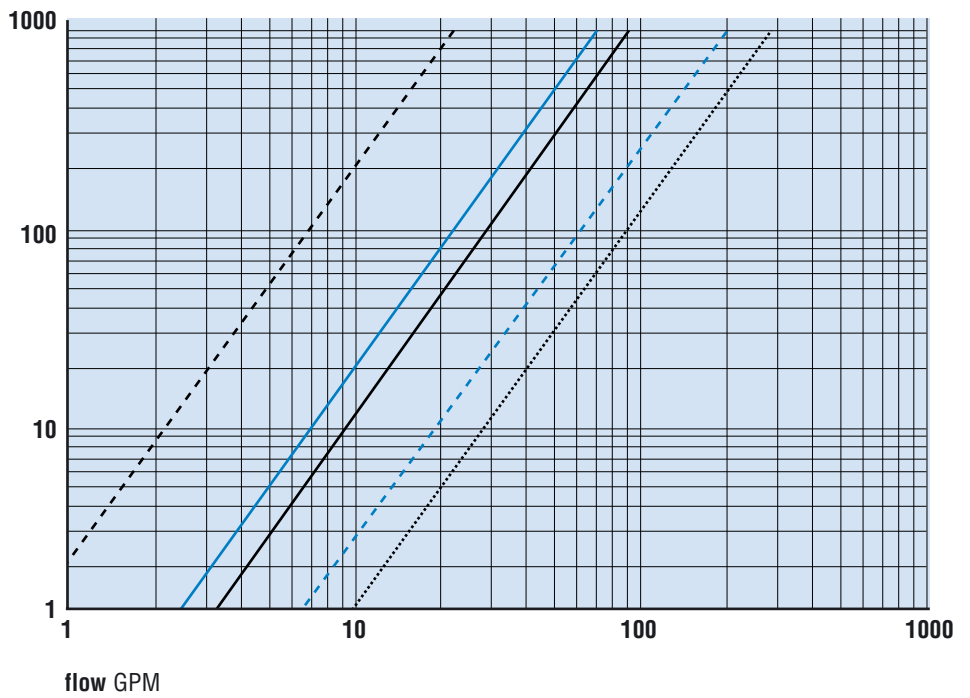
pressure drop psi



### Water flow

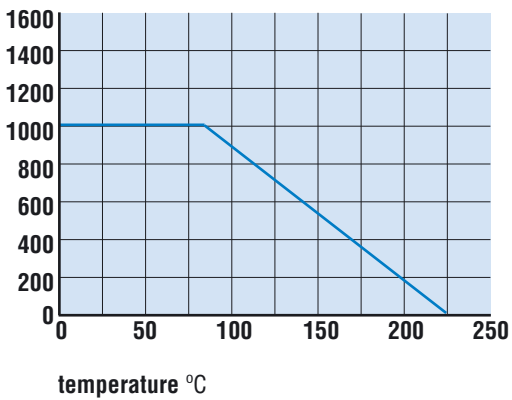
- 1/4" valve
- 3/8" valve
- 1/2" valve
- - 3/4" valve
- ..... 1" valve

pressure drop psi



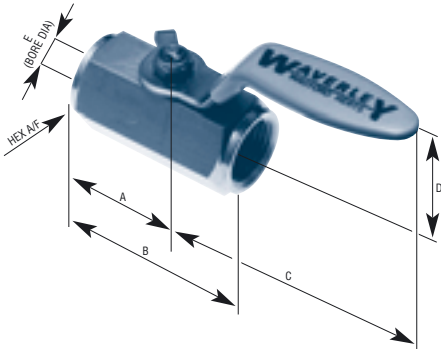
### Pressure vs temperature performance

pressure psi



## BV 1000 SERIES BALL VALVES

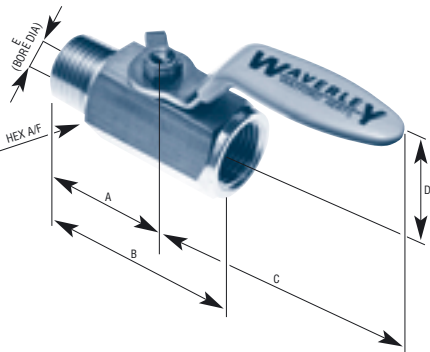
### Female/female 1000lb class



thread size	part number	A	B	C	D	E	hex A/F
G 1/4" BSP	<b>BV2P</b>	0.750"	1.657"	2.375"	1.175"	0.200"	0.750"
G 3/8" BSP	<b>BV3P</b>	0.855"	1.810"	3.225"	1.500"	0.300"	0.875"
G 1/2" BSP	<b>BV4P</b>	1.082"	2.165"	3.250"	1.650"	0.355"	1.062"
G 3/4" BSP	<b>BV6P</b>	1.180"	2.600"	4.100"	2.000"	0.500"	1.300"
G 1" BSP	<b>BV8P</b>	1.675"	3.100"	4.100"	2.100"	0.610"	1.670"
Rc 1/4" BSPT	<b>BV2T</b>	0.750"	1.575"	2.375"	1.175"	0.200"	0.669"
Rc 3/8" BSPT	<b>BV3T</b>	0.855"	1.775"	3.225"	1.500"	0.300"	0.875"
Rc 1/2" BSPT	<b>BV4T</b>	1.082"	2.160"	3.250"	1.650"	0.355"	1.062"
Rc 3/4" BSPT	<b>BV6T</b>	1.180"	2.400"	4.100"	2.000"	0.500"	1.300"
Rc 1" BSPT	<b>BV8T</b>	1.437"	2.950"	4.100"	2.100"	0.610"	1.500"
Rc 1 1/2" BSPT	<b>BV12T</b>	1.800"	3.550"	5.950"	2.750"	0.950"	2.175"
Rc 2" BSPT	<b>BV16T</b>	2.125"	4.250"	5.950"	3.125"	1.250"	2.775"
1/4" NPTF	<b>BV2N</b>	0.750"	1.575"	2.375"	1.175"	0.200"	0.669"
3/8" NPTF	<b>BV3N</b>	0.855"	1.775"	3.225"	1.500"	0.300"	0.875"
1/2" NPTF	<b>BV4N</b>	1.082"	2.160"	3.250"	1.650"	0.355"	1.062"
3/4" NPTF	<b>BV6N</b>	1.180"	2.400"	4.100"	2.000"	0.500"	1.300"
1" NPTF	<b>BV8N</b>	1.437"	2.950"	4.100"	2.100"	0.610"	1.500"

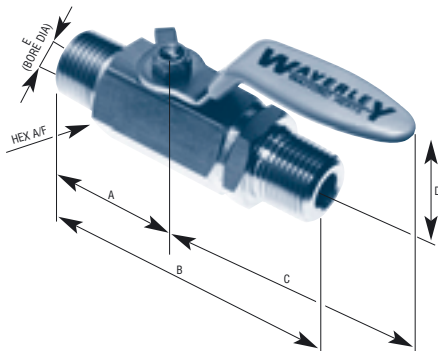
BSP Parallel valves are counter bored in the end faces to accept PTFE O-rings (which are supplied) to act as sealing face.

### Male/female 1000lb class



thread size	part number	A	B	C	D	E	hex A/F
R 1/4" BSPT	<b>BV2 M/F</b>	1.000"	1.812"	2.375"	1.175"	0.200"	0.669"
R 3/8" BSPT	<b>BV3 M/F</b>	1.275"	2.185"	3.225"	1.500"	0.300"	0.875"
R 1/2" BSPT	<b>BV4 M/F</b>	1.350"	2.440"	3.250"	1.650"	0.355"	1.062"
R 3/4" BSPT	<b>BV6 M/F</b>	1.525"	2.750"	4.100"	2.000"	0.500"	1.300"
R 1" BSPT	<b>BV8 M/F</b>	1.750"	3.250"	4.100"	2.100"	0.610"	1.500"
1/4" NPTF	<b>BV2N M/F</b>	1.000"	1.812"	2.375"	1.175"	0.200"	0.669"
1/2" NPTF	<b>BV4N M/F</b>	1.350"	2.440"	3.225"	1.650"	0.355"	1.062"
3/4" NPTF	<b>BV6N M/F</b>	1.525"	2.750"	4.100"	2.000"	0.500"	1.300"

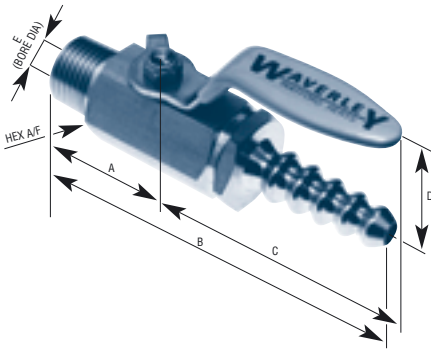
### Male/male 1000lb class



thread size	part number	A	B	C	D	E	hex A/F
R 1/4" BSPT	<b>BV2 M/M</b>	1.000"	2.540"	2.375"	1.175"	0.200"	0.669"
R 3/8" BSPT	<b>BV3 M/M</b>	1.275"	3.000"	3.225"	1.500"	0.300"	0.875"
R 1/2" BSPT	<b>BV4 M/M</b>	1.350"	3.475"	3.250"	1.650"	0.355"	1.062"
R 3/4" BSPT	<b>BV6 M/M</b>	1.525"	3.875"	4.100"	2.000"	0.500"	1.300"
R 1" BSPT	<b>BV8 M/M</b>	1.750"	4.500"	4.100"	2.100"	0.610"	1.500"
1/4" NPTF	<b>BV2N M/M</b>	1.000"	2.540"	2.375"	1.175"	0.200"	0.668"
1/2" NPTF	<b>BV4N M/M</b>	1.350"	3.475"	3.250"	1.650"	0.355"	1.062"
3/4" NPTF	<b>BV6N M/M</b>	1.525"	3.875"	4.100"	2.000"	0.500"	1.300"

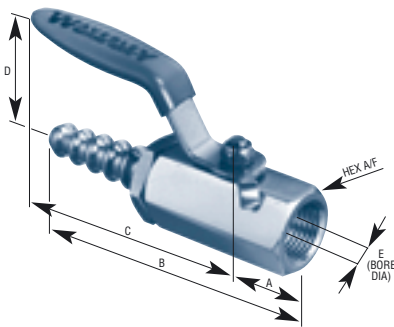
## BV 1000 SERIES BALL VALVES

### Male/straight hose tail 1000lb class



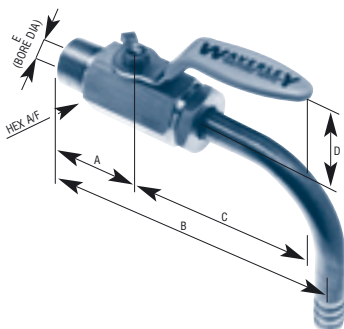
thread size	part number	A	B	C	D	E	hex A/F
R 1/4" BSPT	<b>BV2 M/H</b>	1.000"	2.875"	2.375"	1.175"	0.200"	0.669"
R 3/8" BSPT	<b>BV3 M/H</b>	1.275"	3.687"	3.225"	1.500"	0.300"	0.875"
R 1/2" BSPT	<b>BV4 M/H</b>	1.350"	4.400"	3.250"	1.650"	0.355"	1.062"
R 3/4" BSPT	<b>BV6 M/H</b>	1.525"	5.000"	4.100"	2.000"	0.500"	1.300"
R 1" BSPT	<b>BV8 M/H</b>	1.750"	5.500"	4.100"	2.100"	0.610"	1.670"
1/4" NPTF	<b>BV2N M/H</b>	1.000"	2.875"	2.375"	1.175"	0.200"	0.669"
3/8" NPTF	<b>BV3N M/H</b>	1.275"	3.687"	3.225"	1.500"	0.300"	0.875"
1/2" NPTF	<b>BV4N M/H</b>	1.350"	4.400"	3.250"	1.650"	0.355"	1.062"
3/4" NPTF	<b>BV6N M/H</b>	1.525"	5.000"	4.100"	2.000"	0.500"	1.300"
1" NPTF	<b>BV8N M/H</b>	1.750"	5.500"	4.100"	2.100"	0.610"	1.670"

### Female/straight hose tail 1000lb class



thread size	part number	A	B	C	D	E	hex A/F
R 1/4" BSPT	<b>BV2 F/H</b>	0.750"	2.625"	2.375"	1.175"	0.200"	0.669"
R 3/8" BSPT	<b>BV3 F/H</b>	0.855"	3.267"	3.225"	1.500"	0.300"	0.875"
R 1/2" BSPT	<b>BV4 F/H</b>	1.082"	4.150"	3.250"	1.650"	0.355"	1.062"
R 3/4" BSPT	<b>BV6 F/H</b>	1.180"	4.655"	4.100"	2.000"	0.500"	1.300"
R 1" BSPT	<b>BV8 F/H</b>	1.437"	5.187"	4.100"	2.100"	0.610"	1.670"
1/4" NPTF	<b>BV2N F/H</b>	0.750"	2.625"	2.375"	1.175"	0.200"	0.669"
3/8" NPTF	<b>BV3N F/H</b>	0.855"	3.267"	3.225"	1.500"	0.300"	0.875"
1/2" NPTF	<b>BV4N F/H</b>	1.082"	4.150"	3.250"	1.650"	0.355"	1.062"
3/4" NPTF	<b>BV6N F/H</b>	1.180"	4.655"	4.100"	2.000"	0.500"	1.300"
1" NPTF	<b>BV8N F/H</b>	1.437"	5.187"	4.100"	2.100"	0.610"	1.670"

### Male 90° hose tail 1000lb class



thread size	part number	A	B	C	D	E	hex A/F
R 1/4" BSPT	<b>BV2 M/H 90</b>	1.000"	2.250"	2.375"	1.175"	0.200"	0.669"
R 3/8" BSPT	<b>BV3 M/H 90</b>	1.275"	2.750"	3.225"	1.500"	0.300"	0.875"
R 1/2" BSPT	<b>BV4 M/H 90</b>	1.350"	3.500"	3.250"	1.650"	0.355"	1.062"
R 3/4" BSPT	<b>BV6 M/H 90</b>	1.525"	6.300"	4.100"	2.000"	0.500"	1.300"
R 1" BSPT	<b>BV8 M/H 90</b>	1.750"	6.900"	4.100"	2.100"	0.610"	1.670"
1/4" NPTF	<b>BV2N M/H 90</b>	1.000"	2.250"	2.375"	1.175"	0.200"	0.669"
1/2" NPTF	<b>BV4N M/H 90</b>	1.350"	3.500"	3.250"	1.650"	0.355"	1.062"
3/4" NPTF	<b>BV6N M/H 90</b>	1.525"	6.300"	4.100"	2.000"	0.500"	1.300"
1" NPTF	<b>BV8N M/H 90</b>	1.750"	6.900"	4.100"	2.000"	0.500"	1.300"