

BWJ SERIES

2/2 NORMALLY CLOSED

Valves are actuated by a solenoid pilot, using an internal bleed. A diaphragm provides the seal for the main orifice. The pressure within the valve is utilised to open and close the diaphragm. The BWJ series use a coupled diaphragm design which is mechanically held open via a direct linkage to the solenoid plunger. This enables the valve to operate with zero pressure differential across the main valve orifice.

SPECIFICATIONS

Pressure

Operating pressure range:

Refer to Table.

Minimum pressure differential:

0 kPa (0 psi)

Fluid Temperatures

Nitrile and Viton seals:

Fluid temperature range

-34°C to +82°C (-29°F to +180°F)

EPDM seals:

Fluid temperature range

0°C to +95°C (+32°F to +203°F)

Ambient Temperatures

-34°C to +40°C (-29°F to +104°F)

Approvals and Standards

ISO 9001 Quality Management System,

Certificate: QEC0366

Watermark certificate number:

WMKA00172

C-Tick Mark, Supplier Code: N282

UL Listing: File YIOZ.MH9011

CE Compliance to Directives

2006/95/EC and 2004/108/EC

RoHS Compliance to Directive

2002/95/EC

Part Number Code:

1 2 B W J 2 - E N B N T - 6 0 4 3

Valve Size

6BWJ2	1/4" pipe thread
10BWJ2	3/8" pipe thread
12BWJ2	1/2" pipe thread
20BWJ2	3/4" pipe thread
25BWJ2	1" pipe thread

Internal Construction

C	For use with DC coils only
E	For use with AC coils only

Special Features

N	No special features
U	UL Listed – General Purpose Valve – (AC coils only)
W	Australian Watermark Approval – (EPDM seals only)
X	Cleaned for Oxygen service – (Viton seals only)

Body Material

B	Brass (DR – Dezincification Resistant)
N	Additional electroless nickel plating

Seal Material

E	EPDM
N	Nitrile
V	Viton

Port Thread

T	RC Thread (BSPT)
A	NPT Thread

Coil Options
See page 32.



OPERATING PRESSURE RANGE

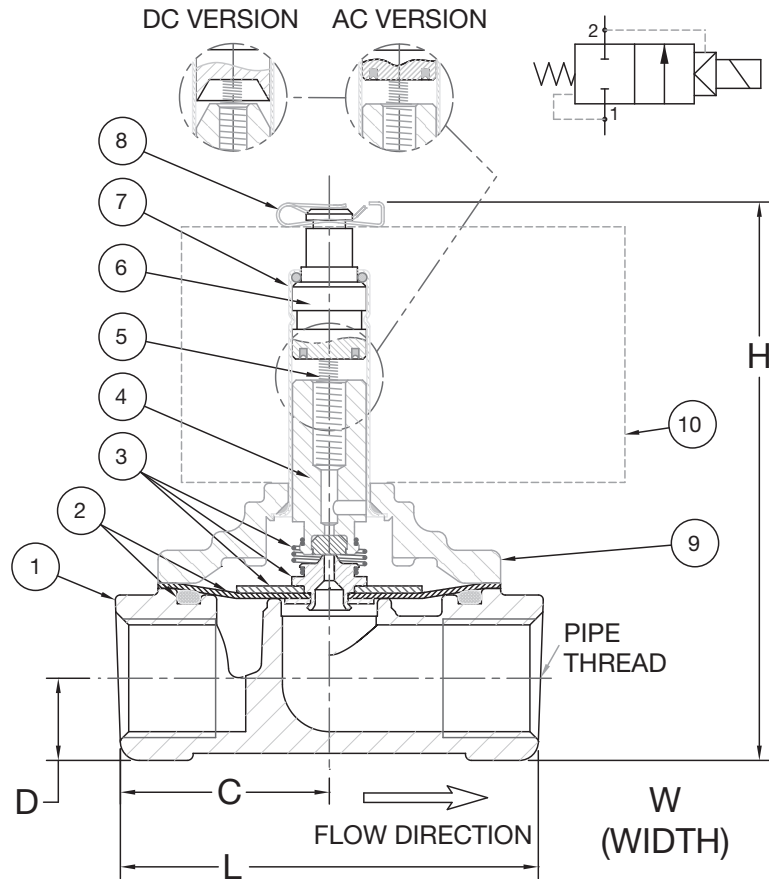
VALVE MODEL	PRESSURE	
	KPA	PSI
6BWJ2	0 to 1000	0 to 150
10BWJ2	0 to 1000	0 to 150
12BWJ2	0 to 1000	0 to 150
20BWJ2	0 to 700	0 to 100
25BWJ2	0 to 400	0 to 60

CONNECTION AND FLOW

VALVE MODEL	PIPE SIZE		ORIFICE SIZE		FLOW FACTOR	
	MM	INCH	MM	INCH	CV	KV
6BWJ2	6	1/4	6.4	0.25	1.1	0.95
10BWJ2	10	3/8	9.5	0.38	2.1	1.81
12BWJ2	12	1/2	12.7	0.50	3.5	3.01
20BWJ2	20	3/4	19.0	0.75	7.7	6.62
25BWJ2	25	1	25.4	1.00	13.2	11.35

DIMENSIONS

VALVE MODEL	L		W		H		C		D	
	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH
6BWJ2	55.0	2.17	41.3	1.63	88.0	3.46	27.5	1.08	11.0	0.43
10BWJ2	55.0	2.17	41.3	1.63	88.0	3.46	27.5	1.08	11.0	0.43
12BWJ2	72.0	2.83	58.0	2.28	95.0	3.74	36.0	1.42	14.3	0.56
20BWJ2	89.0	3.50	68.3	2.69	104.0	4.09	44.5	1.75	17.5	0.69
25BWJ2	105.0	4.13	79.4	3.13	111.0	4.37	52.5	2.07	20.6	0.81



TYPICAL CONSTRUCTION

CONSTRUCTION

ITEM	DESCRIPTION	MATERIAL
1	Body	486 Brass [DR]
2	Diaphragm & Seals	Nitrile, Viton or EPDM
3	Springs & Washers	304 Stainless Steel
4	Plunger	430FR Stainless Steel
5	Plunger Spring	304 Stainless Steel
6	Iron Top	430FR Stainless Steel
7	Ferrule Tube	305-4F Stainless Steel
8	Coil Clip	Plated Steel
9	Cover	486 Brass [DR]
10	Coils	Refer to page 32.

SPARE PARTS KITS – STANDARD COILS

Kits consist of plunger, springs, seals and diaphragm

MODEL		NITRILE	VITON	EPDM
6BWJ2	AC	KM1584	KM1596	KM1600
	DC	KM1664	KM1668	KM1918
10BWJ2	AC	KM1584	KM1596	KM1600
	DC	KM1664	KM1668	KM1918
12BWJ2	AC	KM1585	KM1597	KM1601
	DC	KM1665	KM1669	KM1919
20BWJ2	AC	KM1586	KM1598	KM1602
	DC	KM1666	KM1670	KM1920
25BWJ2	AC	KM1587	KM1599	KM1603
	DC	KM1667	KM1671	KM1921

SPARE PARTS KITS – BH COILS

Kits consist of plunger, springs, seals and diaphragm

MODEL		NITRILE	VITON	EPDM
12BWJ2	AC	KM1946	KM1947	KM3164
	DC	KM3158	KM3159	KM3160
20BWJ2	AC	KM1948	KM1949	KM3165
	DC	KM3161	KM3162	KM3163