



D A T A S H E E T

Ball Valves are used in refrigeration, air-conditioning and heat pump-based systems to isolate suction, discharge and liquid lines. Ball valves have a wide range of temperature and refrigerant application. Emerson ball valves offer leak-proof performance with minimal pressure drop.

Features

- Forged brass body
- Compact and lightweight
- Bi-directional flow characteristics
- Integrated access port available on all connection sizes
- Flared copper tube connections for ease in brazing
- Laser welded construction

Technical Specifications

Body	Brass
Connection Tubes	Copper
Maximum Working Pressure (Bar)	45
Fluid Temperature Range (°C)	-40 to 120
Refrigerant Compatibility	HCFC, HFC including R410a
Agency Approvals	UL

Model Selection

Models Without Access Valve		Models With Access Valve		Connection Size (inch)
PCN	Model	PCN	Model	
081001	BVES-014	081013	BVSS-014	1/4 ODF
081002	BVES-038	081014	BVSS-038	3/8 ODF
081003	BVES-012	081015	BVSS-012	1/2 ODF
081004	BVES-058	081016	BVSS-058	5/8 ODF
081005	BVES-034	081017	BVSS-034	3/4 ODF
081006	BVES-078	081018	BVSS-078	7/8 ODF
081007	BVES-118	081019	BVSS-118	1-1/8 ODF
081008	BVES-138	081020	BVSS-138	1-3/8 ODF
081009	BVES-158	081021	BVSS-158	1-5/8 ODF
081010	BVES-218	081022	BVSS-218	2-1/8 ODF
081011	BVES-258	081023	BVSS-258	2-5/8 ODF
081012	BVES-318	081024	BVSS-318	3-1/8 ODF



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Dimension Data

PCN	Model Description	Connection Size (In.)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
081001	BVES-014	1/4 ODF	6.5 ± 0.10	8.0 ± 1.0	112.0 ± 1.5	28.5	-
081002	BVES-038	3/8 ODF	9.7 ± 0.10	10.0 ± 1.0	126.0 ± 2.5	28.5	-
081003	BVES-012	1/2 ODF	12.90 ± 0.10	10.0 ± 1.0	127.5 ± 2.5	28.5	-
081004	BVES-058	5/8 ODF	16.20 ± 0.15	12.0 ± 1.0	150.0 ± 2.5	30.5	-
081005	BVES-034	3/4 ODF	19.23 ± 0.15	15.0 ± 1.0	164.0 ± 2.5	36.5	-
081006	BVES-078	7/8 ODF	22.40 ± 0.15	20.0 ± 1.0	189.5 ± 2.5	39.0	-
081007	BVES-118	1-1/8 ODF	28.80 ± 0.15	20.0 ± 1.0	209.0 ± 2.5	43.0	-
081008	BVES-138	1-3/8 ODF	35.22 ± 0.10	20.0 ± 1.0	246.0 ± 2.5	53.5	-
081009	BVES-158	1-5/8 ODF	41.57 ± 0.15	25.0 ± 1.0	279.0 ± 2.5	60.0	-
081010	BVES-218	2-1/8 ODF	54.30 ± 0.15	30.0 ± 1.0	320.0 ± 2.5	66.5	-
081011	BVES-258	2-5/8 ODF	67.30 ± 0.15	35.0 ± 1.5	377.0 ± 2.5	82.0	-
081012	BVES-318	3-1/8 ODF	80.30 ± 0.15	40.0 ± 1.5	410.0 ± 4.0	90.5	-
081013	BVSS-014	1/4 ODF	6.5 ± 0.10	8.0 ± 1.0	112.0 ± 1.5	28.5	32.4
081014	BVSS-038	3/8 ODF	9.7 ± 0.10	10.0 ± 1.0	126.0 ± 2.5	28.5	32.4
081015	BVSS-012	1/2 ODF	12.90 ± 0.10	10.0 ± 1.0	127.5 ± 2.5	28.5	32.4
081016	BVSS-058	5/8 ODF	16.20 ± 0.15	12.0 ± 1.0	150.0 ± 2.5	30.5	38.0
081017	BVSS-034	3/4 ODF	19.23 ± 0.15	15.0 ± 1.0	164.0 ± 2.5	36.5	39.5
081018	BVSS-078	7/8 ODF	22.40 ± 0.15	20.0 ± 1.0	189.5 ± 2.5	39.0	43.8
081019	BVSS-118	1-1/8 ODF	28.80 ± 0.15	20.0 ± 1.0	209.0 ± 2.5	43.0	46.0
081020	BVSS-138	1-3/8 ODF	35.22 ± 0.10	20.0 ± 1.0	246.0 ± 2.5	53.5	54.5
081021	BVSS-158	1-5/8 ODF	41.57 ± 0.15	25.0 ± 1.0	279.0 ± 2.5	60.0	60.3
081022	BVSS-218	2-1/8 ODF	54.30 ± 0.15	30.0 ± 1.0	320.0 ± 2.5	66.5	66.0
081023	BVSS-258	2-5/8 ODF	67.30 ± 0.15	35.0 ± 1.5	377.0 ± 2.5	82.0	73.6
081024	BVSS-318	3-1/8 ODF	80.30 ± 0.15	40.0 ± 1.5	410.0 ± 4.0	90.5	81.0

