


Alco Controls

Ball valves BVE / BVS

Technical Bulletin

The BVE / BVS Ball valve is a fully hermetic ball valve for the Refrigeration and A/C industry.

Features

- BVS models with 7/16-20 UNF – ¼" flare connection and Schrader valve
- Two threads at valve body for easy mounting
- Hermetic design
- Compatible for high pressure refrigerants as R 410A and CO₂ (sub-critical)
- Light weight design
- Virgin PTFE seat gaskets
- Bi-directional flow characteristics
- Valve cap retained by strap attached to main body
- Pressure relief port design
- Full flow design (minimal pressure drop)
-  UL approval; produced acc. CE requirements
- Applied Standards EN 12284, EN 378, EN12420, PED 97/23/EC, RoHS 2002/95/EC



BVE



BVS

Selection Chart

Type BVE	Part No.
BVE-014	806 730
BVE-M06	806 731
BVE-038	806 732
BVE-M10	806 733
BVE-012	806 734
BVE-M12	806 735
BVE-058	806 736
BVE-034	806 737
BVE-078	806 738
BVE-118	806 739
BVE-M28	806 740
BVE-138	806 741
BVE-158	806 742
BVE-M42	806 743
BVE-218	806 744
BVE-258	806 745
BVE-318	806 746

Type BVS	Part No.	Connection nominal size		Weight (kg)
		inch	metric	
BVS-014	806 750	1/4"		0.36
BVS-M06	806 751		6mm	0.36
BVS-038	806 752	3/8"		0.36
BVS-M10	806 753		10mm	0.36
BVS-012	806 754	1/2"		0.36
BVS-M12	806 755		12mm	0.38
BVS-058	806 756	5/8"	16mm	0.38
BVS-034	806 757	3/4"		0.66
BVS-078	806 758	7/8"	22mm	0.66
BVS-118	806 759	1 1/8"		1.04
BVS-M28	806 760		28mm	1.04
BVS-138	806 761	1 3/8"	35mm	1.64
BVS-158	806 762	1 5/8"		2.43
BVS-M42	806 763		42mm	2.43
BVS-218	806 764	2 1/8"	54mm	4.76
BVS-258	806 765	2 5/8"		5.54
BVS-318	806 766	3 1/8"		7.72

Technical Data

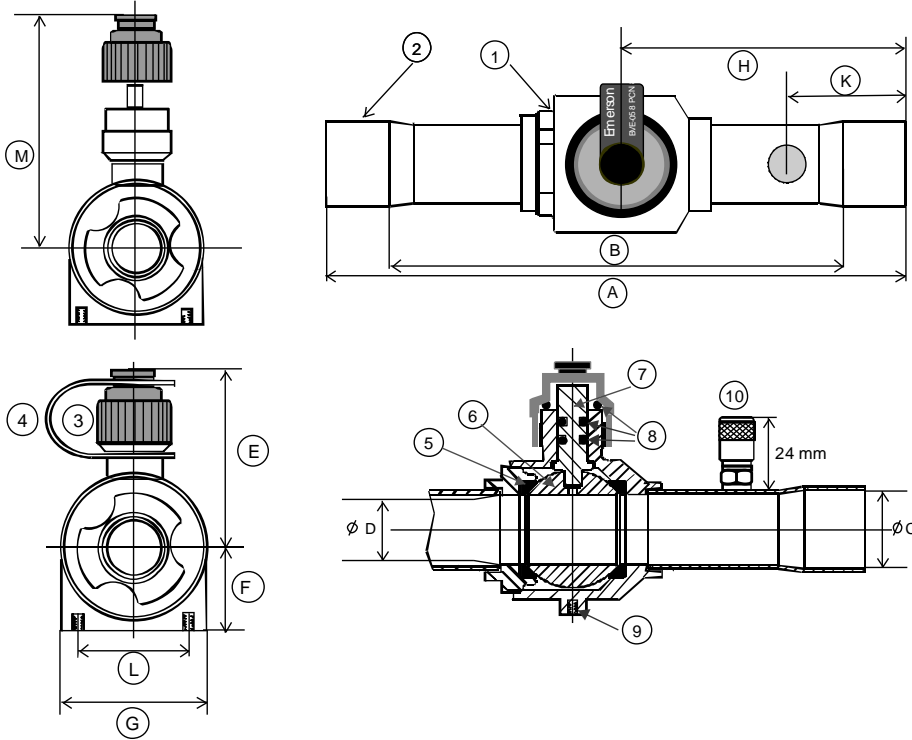
Maximum allowable pressure PS	45 bar
Test pressure PT	49,5 bar
Burst pressure	225 bar
Medium temp. TS	-40 ... 120°C (150°C short term)

Construction	Forged brass body, Copper extension tubes, Chrome plated Ball
Medium compatibility *	HFC, HCFC, CO ₂ , Mineral, Synthetic and Polyol-Ester (POE) lubricants
Material	Body CW617N, Copper Tubes CW 024A acc. EN12420

* BVE / BVS Ball valves are not released for use with caustic, poisonous or flammable substances.

Ball valves BVE / BVS

Dimensions (mm) (Not to scale)



- 1 Sealed brass body
- 2 Copper extension tubes
- 3 Plastic stem cap (Pocan)
- 4 Label strap
- 5 PTFE seats
- 6 Chromate brass ball
- 7 Stem
- 8 O-Rings
- 9 Mounting threads
- 10 BVS with Schrader conn.
7/16-20 UNF-1/4" flare

Model	Nominal size C	A	B	D	E	F	G	H	K	L	M	Thread (9)	Cap (3)
BVE/S 014	1/4" ODF	120	104					56	26			M3	M18
BVE/S M06	6mm ODF			8	41	14	23	55	25	15	64		
BVE/S 038	3/8" ODF	118	102										
BVE/S M10	10mm ODF												
BVE/S 012	1/2" ODF	127	107	14	45	17	31	61	26	22	67	M4	M18
BVE/S M12	12mm ODF		101										
BVE/S 058	5/8" / 16mm ODF	157	125	20	49	20	40	77	35	31	72		
BVE/S 034	3/4" ODF		118										
BVE/S 078	7/8" / 22mm ODF	169	123	25	67	26	51	85	39	38	98	M27	
BVE/S 118	1 1/8" ODF		118										
BVE/S M28	28mm ODF												
BVE/S 138	1-3/8" / 35mm ODF	231	182	32	72	31	61	116	52	48	104	M6	M36
BVE/S 158	1-5/8" ODF	277	220	39	88	37	74	138	60	55	123		
BVE/S M42	42mm ODF												
BVE/S 218	2-1/8" / 54mm ODF		228	50	95	47	93	148	65	74	131		
BVE/S 258	2-5/8" ODF	297	222						70				
BVE/S 318	3-1/8" ODF		213						80				

Dimension "C": Suitable for the connection of the stated nominal tube size.

Accessories: Special seal caps (Pocan)

BVE / BVS Valve Size	Part No.	Thread (3)	Quantity per pack
1/4" ... 7/8" (6 ... 22mm)	806 770 M	M18x1	10 pcs
1-1/8" ... 1 3/8" (28 ... 35mm)	806 771 M	M27x1	10 pcs
1-5/8 (42 mm) ... 3-1/8"	806 772 M	M36x1	10 pcs



21.01.2013 - Ball valves BVE / BVS

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