

## Data Sheet

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
- BVSS/BVST version with access valve
- BVET/BVST version with two thread holes at valve body for easy mounting
- Flared copper tube connection for ease in brazing
- Laser welded construction
- UL approval



### Technical Specification

Item	Product Specification
Body	Forged Brass
Connection Tubes	Copper
Maximum Working Pressure (barg)	45
Fluid Temperature Range (°C)	-40 to 120
Refrigerant Compatibility	HCFC, HFC, HFO

### Nomenclature

BV	E	S	014
Ball Valve	E: without access valve	S: without thread hole	Connection Size ODF
	S: with access valve	T: with thread hole	



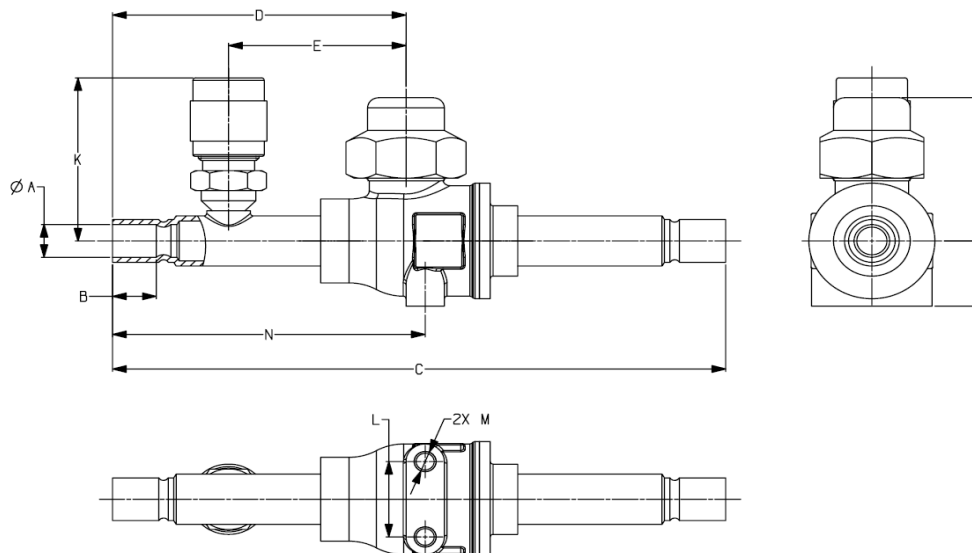
## Data Sheet

### Model Selection

Without thread hole			Connections ODF	Caliber Size	Weight	With thread hole		
PCN	Model	Access valve	inch	mm	kg	PCN	Model	Access valve
081001	BVES-014		1/4	9.5	0.14	081025	BVET-014	
081013	BVSS-014	√				081037	BVST-014	√
081002	BVES-038		3/8	9.5	0.15	081026	BVET-038	
081014	BVSS-038	√				081038	BVST-038	√
081003	BVES-012		1/2	9.5	0.16	081027	BVET-012	
081015	BVSS-012	√				081039	BVST-012	√
081004	BVES-058		5/8	12.5	0.21	081028	BVET-058	
081016	BVSS-058	√				081040	BVST-058	√
081005	BVES-034		3/4	15	0.31	081029	BVET-034	
081017	BVSS-034	√				081041	BVST-034	√
081006	BVES-078		7/8	18	0.41	081030	BVET-078	
081018	BVSS-078	√				081042	BVST-078	√
081007	BVES-118		1-1/8	23	0.57	081031	BVET-118	
081019	BVSS-118	√				081043	BVST-118	√
081008	BVES-138		1-3/8	30	1.01	081032	BVET-138	
081020	BVSS-138	√				081044	BVST-138	√
081009	BVES-158		1-5/8	35	1.64	081033	BVET-158	
081021	BVSS-158	√				081045	BVST-158	√
081010	BVES-218		2-1/8	47	2.46	081034	BVET-218	
081022	BVSS-218	√				081046	BVST-218	√
081011	BVES-258		2-5/8	57	4.13	081035	BVET-258	
081023	BVSS-258	√				081047	BVST-258	√
081012	BVES-318		3-1/8	70	6.80	081036	BVET-318	
081024	BVSS-318	√				081048	BVST-318	√

# Data Sheet

## Dimensions (mm)



Model	$\varnothing A$	C	B	N	D	H	K	G	E	Model	L	M
	inch	mm	mm	mm	mm	mm	mm	mm	mm		mm	mm
BVES-014	1/4	112.0	8.0	56.5	53.6	28.5	-	13.0	-	BVET-014	15.0	M4*4.0
BVSS-014							31.0		32.4	BVST-014		
BVES-038	3/8	126.0	10.0	64.1	60.6	28.5	-	13.0	-	BVET-038	15.0	M4*4.0
BVSS-038							31.0		32.4	BVST-038		
BVES-012	1/2	127.5	10.0	64.8	61.4	28.5	-	13.0	-	BVET-012	15.0	M4*4.0
BVSS-012							32.0		32.4	BVST-012		
BVES-058	5/8	150.0	12.0	77.5	74.0	30.5	-	14.5	-	BVET-058	19.0	M4*4.0
BVSS-058							32.0		38.0	BVST-058		
BVES-034	3/4	164.0	15.0	82.2	78.3	36.5	-	17.0	-	BVET-034	22.0	M5*5.0
BVSS-034							33.5		39.5	BVST-034		
BVES-078	7/8	189.5	20.0	97.3	93.3	39.0	-	19.5	-	BVET-078	24.0	M5*5.0
BVSS-078							35.0		43.8	BVST-078		
BVES-118	1-1/8	209.0	20.0	106.9	103.0	43.0	-	23.0	-	BVET-118	32.0	M5*6.0
BVSS-118							38.0		46.0	BVST-118		
BVES-138	1-3/8	246.0	20.0	127.2	122.3	53.5	-	28.5	-	BVET-138	36.0	M6*6.0
BVSS-138							41.5		54.5	BVST-138		
BVES-158	1-5/8	279.0	25.0	145.8	139.3	60.0	-	34.5	-	BVET-158	44.0	M8*7.0
BVSS-158							44.0		60.3	BVST-158		
BVES-218	2-1/8	320.0	30.0	166.7	160.3	66.5	-	42.5	-	BVET-218	54.0	M8*8.0
BVSS-218							50.0		66.0	BVST-218		
BVES-258	2-5/8	377.0	35.0	195.1	188.6	82.0	-	51.5	-	BVET-258	65.0	M8*8.0
BVSS-258							56.5		73.6	BVST-258		
BVES-318	3-1/8	410.0	40.0	213.0	205.0	90.5	-	61.5	-	BVET-318	88.0	M10*10.0
BVSS-318							63.0		81.0	BVST-318		

Notes: no screw bolt as attached accessory.