PRODUCT MANUAL

Ball valve

Model: BV6s – BV79s



CATEGORY	MODEL	ISSUE DATE
Refrigeration Valves	**BV6s – BV79s**	**2026-11-28**

1. Product Overview

Ball valve

The BV series is a brass ball valve for isolating sections of a refrigeration or air-conditioning circuit. A quarter turn takes the valve from fully open to fully closed, which makes it the usual choice wherever a line has to be shut off for service without pumping the charge out of the whole system: either side of a filter drier, at the inlet and outlet of a solenoid valve, on each branch of a manifold, or at the suction and liquid connections of a condensing unit.

The body is brass with a chrome-plated ball running between PTFE seats, and the stem is blow-off proof, so line pressure cannot push the stem out of the body if the retaining nut is loosened. The port is full bore, which matters on the suction side: a reduced-port valve of the same nominal size adds a pressure drop that is easy to miss when the line is sized, and it shows up later as lost capacity at low evaporating temperature.

Eighteen sizes cover both metric and inch tube. Metric ends run from 6 mm to 42 mm, inch ends from 1/4 inch to 3-1/8 inch, and the overall length grows from 138 mm on the smallest body to 305 mm on the largest. Kv values are published for each size, from 2.0 m3/h on BV6s up to 80.9 m3/h on the largest bodies, so the pressure drop at the design flow can be calculated rather than estimated.

Selection is normally by line size first, then by Kv. On liquid lines the valve is almost never the limiting item, but on suction lines above roughly 7/8 inch it is worth checking the Kv against the expected flow and the allowable drop, particularly on low-temperature systems where the compressor is sensitive to suction pressure.

Installation notes that matter in practice: the valve can be mounted in any orientation, but the lever needs clearance to swing; when brazing, wrap the body in a wet cloth and keep the flame away from the seats, since the PTFE will deform long before the brass shows any sign of heat. Leave the valve half open during brazing so heat can escape through the bore.

2. Key Features

- Full-port brass ball valve with blow-off proof stem
- Metric and inch connections from 6 mm to 3-1/8"
- Suitable for refrigeration and air-conditioning lines

3. Technical Specifications

Item	Specification
Model range	BV6s – BV79s (18 sizes)
Connection	Metric 6 – 42 mm or inch 1/4" – 3-1/8"
Overall length L	138 – 305 mm
Kv value	2.0 – 80.9 m³/h

4. Commercial Terms

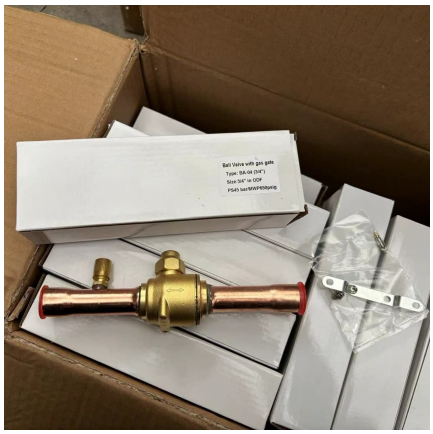
MINIMUM ORDER **1 set**	LEAD TIME **Negotiable**
SHIPPING PORT **Shanghai / Ningbo, China**	PLACE OF ORIGIN **China**
PAYMENT TERMS **T/T, L/C**	SUPPLY ABILITY **Negotiable**

5. Product Gallery









Contact us for a free quotation

Our engineering team replies within 24 hours with selection advice and an FOB / CIF quotation.



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