PRODUCT MANUAL

Solenoid Valve - C Series

Model: Orifice 2.5 / 7 / 12.5 / 16.5 mm



CATEGORY	MODEL	ISSUE DATE
Refrigeration Valves	**Orifice 2.5 / 7 / 12.5 / 16.5 mm**	**2026-11-22**

1. Product Overview

The C series is a normally closed solenoid valve for refrigerant lines. Energising the coil opens the valve; when the supply is removed a spring returns the plunger and the valve shuts, which is what makes it usable as the master valve on a pump-down circuit, as a liquid line stop valve, or as the hot gas and liquid line valves in a defrost arrangement.

Four orifice sizes are offered - 2.5, 7, 12.5 and 16.5 mm - with Kv factors from 0.175 to 5.7 m3/h. The orifice sets the capacity, and published nominal capacities run from 2.08 kW to 57.00 kW on R404A and 3.15 kW to 66.70 kW on R22. Capacity depends strongly on the pressure difference across the valve, so the table has to be read at the actual operating condition rather than at a nominal figure.

Coils are available for DC12V, DC24V, AC110V, AC220V and AC380V, covering battery and solar systems as well as the usual mains supplies. The valve is rated for media temperatures from -40 C to +110 C, a maximum working pressure of 40 bar and 100,000 operating cycles, and is compatible with R12, R22, R134a, R404A, R407C, R410A and R502.

Connections are flare from 1/4 inch to 7/8 inch or solder from 1/4 inch to 1-1/8 inch, so the same family fits copper tube without adapters.

Practical notes: mount the valve with the coil uppermost so dirt does not settle on the plunger, and fit a strainer upstream - solenoid valves fail from debris far more often than from coil failure. Keep the coil within its rated voltage; a coil run at low voltage may hold an open valve but fail to pull it in.

2. Key Features

- Direct-acting solenoid valve for refrigeration and air-conditioning lines
- Flare or solder connection versions
- Coil options for DC and AC voltages
- 100,000 cycle service life with 40 bar maximum working pressure

3. Technical Specifications

Item	Specification
Coil voltage	DC12V / DC24V / AC110V / AC220V / AC380V
Refrigerant	R12, R22, R134a, R404, R407C, R410A, R502
Media temperature	-40 °C ~ +110 °C
Max. working pressure	40 bar
Service life	100,000 cycles
Connection	Flare 1/4" – 7/8" or solder 1/4" – 1-1/8"
Orifice	2.5 / 7 / 12.5 / 16.5 mm

Item	Specification
Kv factor	0.175 – 5.7 m³/h
Nominal capacity	2.08 – 57.00 kW (R404A); 3.15 – 66.70 kW (R22)

4. Commercial Terms

MINIMUM ORDER
Negotiable

LEAD TIME
Negotiable

SHIPPING PORT
Shanghai / Ningbo, China

PLACE OF ORIGIN
China

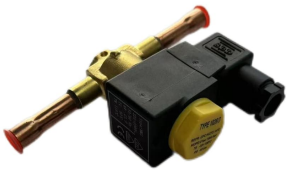
PAYMENT TERMS
T/T, L/C

SUPPLY ABILITY
Negotiable

5. Product Gallery









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



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