



Pilot valves for servo operated main valves

Each pilot valve is designed to give the optimum control accuracy within the specific function range of the valve.

Several pilot valves can be mounted in series and/or in parallel on a ICS or PM main valve to give a very large number of functions.

Mounted in a CVH housing, the pilot valves can be used in external lines, either as independently operating valves or as external control valves for the main valve.



Advantages and features

The range of pilot valves consists of:

- Constant-pressure pilot valve, type CVP (LP) and CVP (HP)
- Differential-pressure pilot valve, type CVPP (LP) and CVPP (HP)
- High pressure pilot valve, type CVP (XP) ideal for CO₂ hot gas defrosting
- Pressure-operated pilot valve with reference pressure connection, type CVC
- Electronically operated constant-pressure pilot valve, type CVQ (pressure-dependent)
- Solenoid pilot valve, type EVM (NC)
- Solenoid pilot valve, type EVM (NO)
- Housing, type CVH for pilot valves, for mounting in external pilot lines




- Applicable to all common non flammable refrigerants including R 717 and non corrosive gases/liquids dependent on sealing material compatability.
- The pilot valves can be screwed direct into the main valve, thus avoiding the necessity of welding, soldering and separate pilot lines.
- The pilot valves can be mounted direct in a ICS or PM main valve or be connected via an external pilot line and a CVH housing.
- All pilot valves can be used on all sizes of main valves.
- Extremely accurate pressure and temperature control.
- Several pilot valves can be connected in series or in parallel to provide many functions in the same ICS or PM main valve.

Technical data and code numbers





Technical data

	Valve type	MWP	k _v -value	Temperature range	Pressure range	Code no.
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Low-pressure version

	CVP (LP)	17 bar g	0.40 m³/h	–50 to 120°C	0 bar g to 7 bar g	027B1100
	CVP (LP)	17 bar g	0.40 m³/h	–50 to 120°C	–0.66 bar g to 2 bar g	027B1101
	CVPP (LP)	17 bar g	0.40 m³/h	–50 to 120°C	Δp = 0 to 7 bar g	027B1102
	CVC (LP)	28/17 bar g	0.20 m³/h	–50 to 120°C	–0.45 bar g to 7 bar g	027B1070


High-pressure version

	CVP (HP)	28 bar g	0.40 m³/h	–50 to 120°C	4 bar g to 22 bar g	027B1160
	CVP (HP)	28 bar g	0.40 m³/h	–50 to 120°C	4 bar g to 28 bar g	027B1161
	CVP (HP)	28 bar g	0.40 m³/h	–50 to 120°C	–0.66 bar g to 7 bar g	027B1164
	CVPP (HP)	28 bar g	0.40 m³/h	–50 to 120°C	Δp = 0 to 7 bar g	027B1162
	CVPP (HP)	40 bar g	0.40 m³/h	–50 to 120°C	Δp = 4 to 22 bar g	027B1268
	CVP (XP)	52 bar g	0.45 m³/h	–50 to 120°C	25 bar g to 52 bar g	027B0080
	CVC (XP)	52/28 bar g	0.20 m³/h	–50 to 120°C	4 bar g to 28 bar g	027B0087


Normally closed


	EVM (NC)	45.2 bar g	0.37 m³/h		MOPD: 21 bar g	027B1120
	EVM (NC)	65 bar g	0.37 m³/h		MOPD: 21 bar g	032F8011

Normally open

	EVM (NO)	45.2 bar g	0.12 m³/h		MCPD: 19 bar g	027B1130
	EVM (NO)	52 bar g	0.12 m³/h		MCPD: 19 bar g	027B1131

CVQ electrical data

	CVQ	17 bar g	0.45 m³/h		–1 bar g to 5 bar g	027B1139
	CVQ	17 bar g	0.45 m³/h		0 bar g to 6 bar g	027B1140
	CVQ	17 bar g	0.45 m³/h		1.7 bar g to 8 bar g	027B1141

Supply voltage		24V a.c. ±10%	
Frequency		50 to 60 Hz	
Power consumption,	operation	50 VA	
	start	75 VA	
Enclosure		NEMA 3 / IP55	
Cable entry		Pg 13.5	
Ambient temperature,	operation	–30 to 50°C (–22 to 122°F)	
	transport	–50 to 70°C (–58 to 158°F)	
 -marking		EMC-Directive 89/336/EEC, EMC-Directiv 89/336/ EN 50081-1 and EN 50082-1	