

Valve Station

Data Sheet

Type: PVS

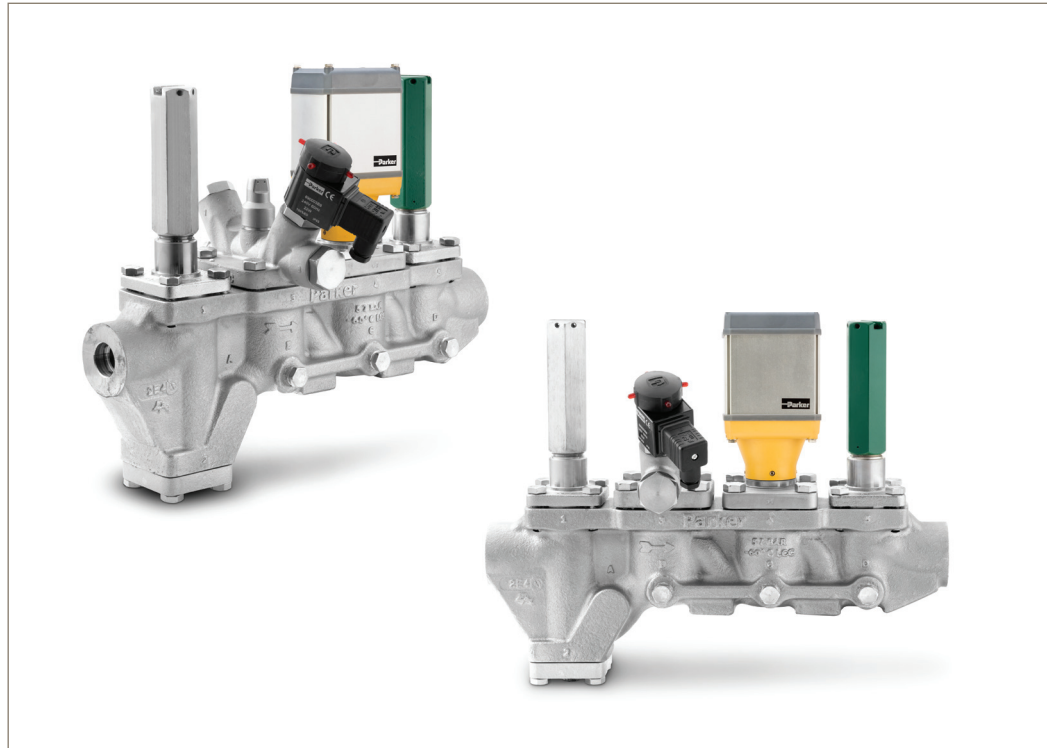
Port Sizes: 20mm - 50mm ($\frac{3}{4}$ " - 3")



Purpose:

The Parker Valve Station (PVS) is designed to simplify the modern industrial refrigeration system. The PVS is an integrated design featuring proven solenoid, regulator or electronic valve modules in conjunction with isolation valves, check valve and strainer. This integrated design, compared to traditional flanged setups, has the industries leading flow capacity and reduces installation time. The plated cast steel housing ensures long life without any environmental impact.

The standard applications for the PVS are pumped liquid, liquid injection and applications with hot gas defrost.



Contact Information: Product Features:

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- Suitable for ammonia, CO₂ and halocarbon refrigerants
- Plated cast steel housing
- Overall weight reduction up to 50% compared to traditional flanged products
- Cartridge based design simplifies service and eliminates body wear
- Top mounted hand valves for longer life and improved reliability
- Serviceable from the top using standard tools
- Designed to ensure optimum flow
- Multiple refrigerant capacities and configurations available; two stage soft gas solenoid and gas powered suction stop modules available
- Interchangeable with other P-Series control offerings
- Coil options to meet various applications
- Lock out seal caps



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Technical Data

- Liquid Temperature Range:
-60°C to 120°C (-76°F to 248°F)
- Ambient Temperature Range with the Parker Electronic Valve (PEV) Option:
-40°C to 50°C (-40°F to 122°F)
- Ambient Temperature Range with Solenoid or Regulator Option:
-60°C to 60°C (-76°F to 140°F)
- Max Rated Pressure (MRP):
52 bar (754 psig)
- Maximum Operating Pressure Difference (MOPD):
20.7 bard (300 psid)

Port Sizes Flow ^[1]/Coefficients ^[2]:

Port Size		K _v	C _v
mm	inch		
20	3/4	9.1	10.5
25	1	12	14
32	1 1/4	15.7	18.2
40	1 1/2	28	32.4
50	2	48	55
65	2 1/2	65	75
80	3	87	100

- Pressure Regulator Range:
Range V: 250mm Hg - 8.3 bar
(10in Hg - 120 psig)
Range A: 0.35 - 10.3 bar (5 - 150 psig)
Range D: 5.2 - 19.3 bar (75 - 280 psig)
Range E: 6.9 - 51.7 bar (100 - 750 psig)

Connections Types and Sizes:

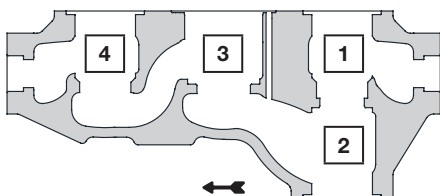
Port Size		SW, BW SS ANSI	BW DIN
mm	inch		
20	3/4	3/4", 1", 1 1/4"	20, 25, 32
25	1		
32	1 1/4	1 1/4", 1 1/2"	32, 40
40	1 1/2	1 1/2", 2"	40, 50
50	2	2"	50, 65
65	2 1/2	2 1/2", 3"	65, 80
80	3	2 1/2", 3"	65, 80

- Coil Voltages:
Consult Factory

1. Capacities shown are for full ported plug. Reduced capacity plugs available upon request. Consult bulletin 10-00 for details.

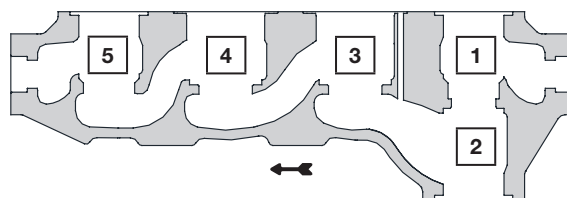
2. The flow coefficient shown is for the control module in position three shown below. Full capacity K_v (C_v) shown in table. For additional flow coefficient values see product bulletin 10-00.

Four Position Valve Station



1. Shut-Off Module
2. Strainer Module (Note: Strainer module is optional for 2" and larger port sizes.)
3. Control Module (PEV/Solenoid/Regulator Option)
4. Shut-Off or Stop/Check Module

Five Position Valve Station



1. Shut-Off Module
2. Strainer Module
3. Control Module (Solenoid/Regulator Option)
4. Parker Electronic Valve (PEV) or Hand Expansion Valve Module
5. Shut-Off or Stop/Check Module

Common Valve Configurations

Suction Stop Regulator	Pumped Liquid Feed	Suction Regulator	Hot Gas Defrost	2 Stage Solenoid	Liquid Feed
Shut-Off	Shut-Off	Shut-Off	Shut-Off	Shut-Off	Shut-Off
Strainer	Strainer	Strainer	Strainer	Strainer	Strainer
Regulator	Solenoid	Regulator	Solenoid	Solenoid	Solenoid
—	HEV	—	—	—	PEV
Shut-Off/Check	Shut-Off/Check	Shut-Off	Shut-Off	Shut-Off	Shut-Off