Valve Station

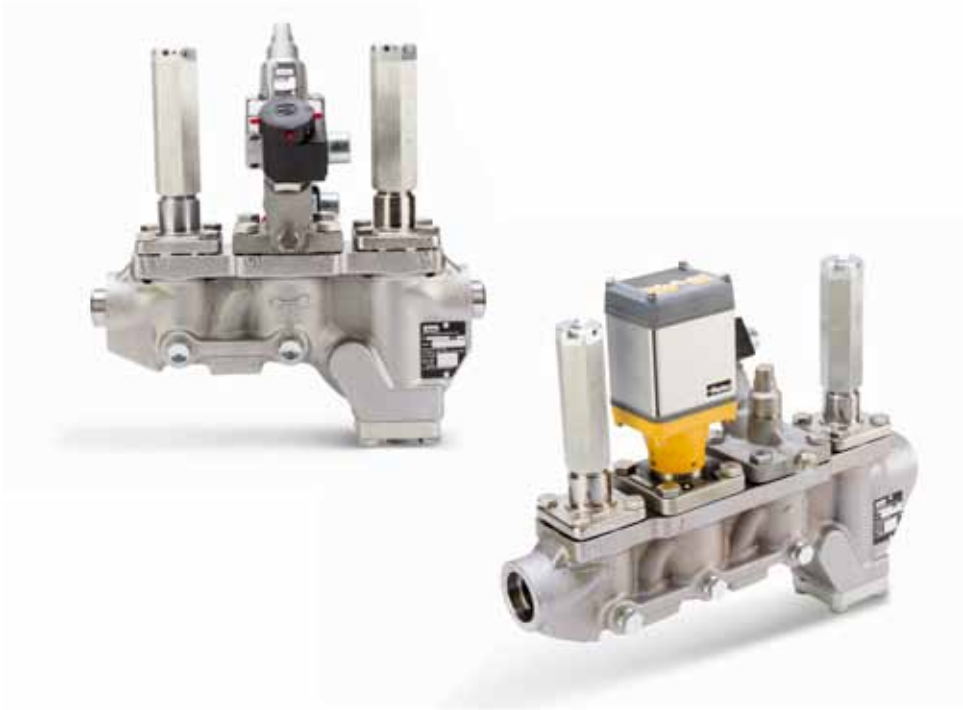
Data Sheet

Type: PVS
Port Sizes: 20mm - 40mm (¾" - 1½")

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 intergrated 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.



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Product Features:

- Suitable for ammonia, CO_2 and halocarbon refrigerants
- Plated cast steel housing
- Overall weight reduction up 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
- 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 barg (754 psig)
- Port sizes [1]:
  20mm (¾"), 25mm (1")
  32mm (1¼"), 40mm (1½")
- Flow Coefficients [2]:

Port Size		K_V	C_V
mm	inch		
20	¾	9.1	10.5
25	1	12.1	14.0
32	1¼	15.7	18.2
40	1½	28.0	32.4

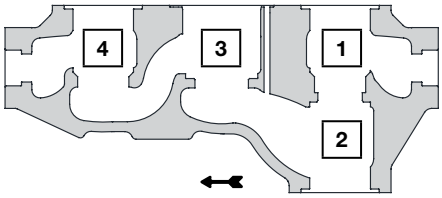
- Connections Types and Sizes:

Port Size		SW, BW SS ANSI	BW DIN
mm	inch		
20 25	¾ 1	¾", 1", 1¼"	20, 25, 32
32	1¼	1¼", 1½"	32, 40
40	1¼	1½", 2"	40, 50

- Pressure Regulator Range:
  Range A: 0.35 - 8.3 bar (5 - 120 psig)
  Range D: 5.2 - 19.3 bar (75 - 280 psig)
- Maximum Operating Pressure Difference (MOPD):
  20.7 bard (300 psid)
- Coil Voltages:
  100-110V AC/60 Hz, 100V AC/50 Hz
  120V AC/60 Hz, 110V AC/50 Hz
  200-220V AC/60 Hz, 200V AC/50 Hz
  208-240V AC/60 Hz
  220-230V AC/50Hz
  240V AC/60 Hz, 220V AC/50 Hz
  24V DC

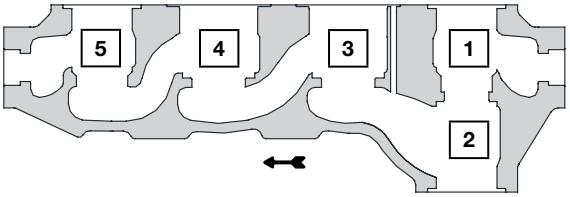
1. The 20 mm (¾") port is available with a standard (full), 65% and 30% reduced plugs. The 32 mm (1¼") port is available with a standard (full) and 50% reduced plugs. The 40 mm (1½") port is available with a standard (full) and 30% reduced plugs.
2. The flow coefficient shown is for the control module in position three shown below. Full capcaity Kv (Cv) shown in table. For additional flow coefficient values see product bulletin 10-00.

Four Position Valve Station

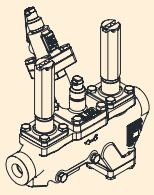
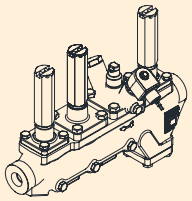
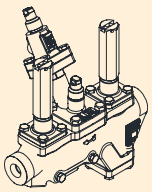
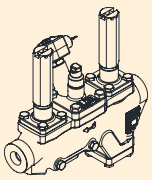
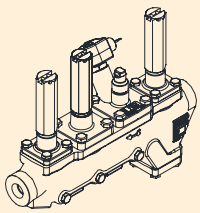
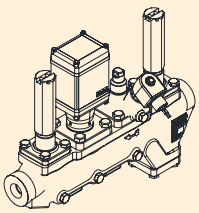


1. Shut-Off Module
2. Strainer Module
3. Control Module (PEV/Solenoid/Regulator Option)
4. Shut-Off or Stop/Check Module

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					
Relief Regulator	Pumped Liquid Feed	Suction Regulator	Hot Gas Defrost	High Pressure Liquid	Liquid Feed
					
Shut-Off	Shut-Off	Shut-Off	Shut-Off	Shut-Off	Shut-Off
Strainer	Strainer	Strainer	Strainer	Strainer	Strainer
Regulator (K)	Solenoid	Regulator	Solenoid	Solenoid	Solenoid
—	HEV	—	—	HEV	PEV
Shut-Off/Check	Shut-Off/Check	Shut-Off	Shut-Off	Shut-Off	Shut-Off