

# PLASTIC AC System Valves

Envisioned, engineered and manufactured by  
Schrader Pacific USA



OE high and low side plastic line  
AC application designs

## ADVANTAGES

### **Option A - Metal Core Thread, Plastic Port**

- Serviceable core
- Utilizes valve cores currently used in vehicles
- Schrader supplied valve core installed, leak tested and pin height confirmed in port.

### **Option B - Metal Core Thread, Metal Port**

- Serviceable core
- Utilizes valve cores currently used in vehicles
- Schrader supplied valve core installed, leak tested and pin height confirmed in port.
- Robust metal port

### **Option C - Plastic Primary Seal Valve**

- Cost effective
- 25-year proven design
- Leak test verified integrated valve

## ADVANTAGES

### **Option D - Threaded Plastic Primary Seal Valve**

- Serviceable valve port
- 25-year proven design
- Leak test verified integrated valve

### **Option E - Primary Seal Valve, Plastic Thread Connection**

- Cost effective
- Serviceable valve port
- 25-year proven design
- Leak test verified integrated valve
- Robust metal port

### **Option F - Primary Seal Valve, Metal Thread Connection**

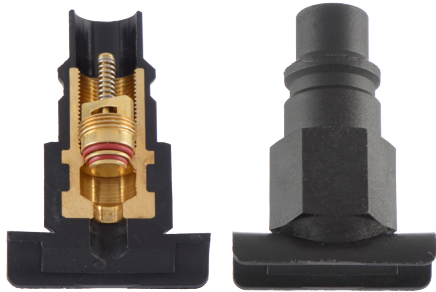
- Serviceable valve port
- 25-year proven design
- Leak test verified integrated valve
- Robust metal port
- Large thread allows wide range installation torque
- No seal contamination during assembly



# SCHRADER PACIFIC PLASTIC AC VALVE DESIGN COMPARISON

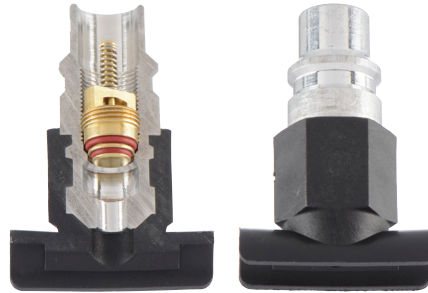
## Option A

Metal Core Thread, Plastic Port



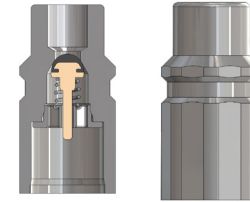
## Option B

Metal Core Thread, Metal Port



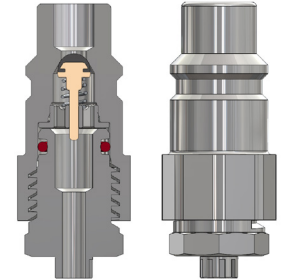
## Option C

Plastic Primary Seal Valve



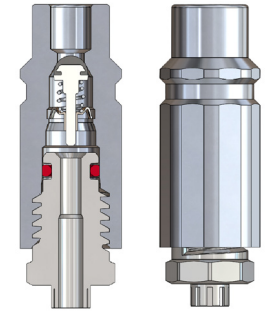
## Option D

Threaded Plastic Primary Seal Valve



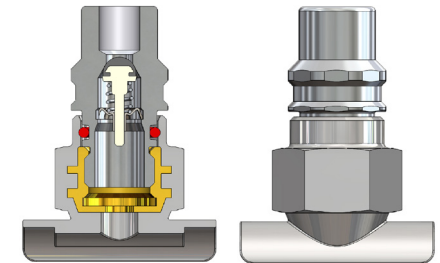
## Option E

Primary Seal Valve, Plastic Thread Connection



## Option F

Primary Seal Valve, Metal Thread Connection



	Relative Cost	Risk	Severity	Occurance	Detection	RPN	Total RPN	Serviceable Core?
<b>Option A</b>	\$\$	Leakage between Metal & Plastic	5	8	4	160	392	Y
		Coupler damage to plastic port	6	8	4	192		
		Valve Core Leakage	5	2	4	40		
<b>Option B</b>	\$\$	Leakage between Metal & Plastic	5	8	4	160	248	Y
		Coupler damage to metal port	6	2	4	48		
		Valve Core Leakage	5	2	4	40		
<b>Option C</b>	\$	Coupler damage to plastic port	6	8	4	192	292	N
		Plastic Primary Seal Valve Leakage	5	5	4	100		
<b>Option D</b>	\$\$	Coupler damage to plastic port	2	8	4	64	356	Y
		Plastic Primary Seal Valve Leakage	5	5	4	100		
		Plastic thread failure	6	8	4	192		
<b>Option E</b>	\$	Coupler damage to metal port	2	2	4	16	288	Y
		Primary Seal Valve Leakage	5	2	4	40		
		Plastic thread failure	6	8	4	192		
<b>Option F</b>	\$\$	Coupler damage to metal port	2	2	4	16	216	Y
		Primary Seal Valve Leakage	5	2	4	40		
		Plastic OD O-ring Gland Leakage	5	8	4	160		