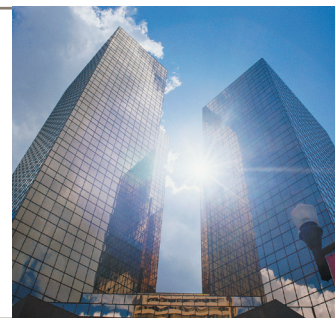


## RV Series Solenoid Valve



ENGINEERING YOUR SUCCESS.

## RV Series Solenoid Valve



### Introduction

RV Series is a new range of piston pilot operated solenoid valves for the liquid line, suction line and hot gas service for refrigeration and AC applications. RV Series are compatible with all CFC, HCFC, HFC and Sub-critical CO<sub>2</sub> refrigerants and blends and most refrigeration oils in the limit of MRP of 650 psi (45 bar).

### Features

- Applicable for fluid temperatures up to 120°C
- MOPD up to 35 bar
- Compact, Direct acting / Pilot available
- Mount Horizontally, on Side, or in a Vertical Line
- Multiple coil solutions available from Parker type 7 coil platform

### Applications

- Air Conditioner
- Heat Pump
- Transportation Air Conditioner
- Supermarket System
- Chiller
- Refrigerated Device

### Nomenclature

RV	3	S	3	0	CUSTOMER CODE
Valve Type Optional	Orifice size	Connection Type	Connection size	Inlet X Outlet	Operation Method
RV=Normally Close MRV=Manual Adjust ORV=Normally Open	3=3/32" 5=5/32" 6=6/32" 9=9/32" 10=10/32" 14=14/32" 19=19/32" 25=25/32" 35=35/32" 43=43/32"	S=ODF F=SAE	2=1/4" 3=3/8" 4=1/2" 5=5/8" 7=7/8" 9=1-1/8" 11=1-3/8" 13=1-5/8" 17=2-1/8"	空白=ODFXODF 1=ODFXODM 2=ODMXODF 3=ODMXODM	

### Specifications

- Fluid Media: All CFC, HCFC, HFC and Sub-critical CO<sub>2</sub> refrigerants and blend including R410A
- Ambient Temperature: -40°C ~ 50°C
- Fluid Temperature: -40°C ~ 120°C
- Humidity Condition: No Limitation
- Minimum Operating Pressure Differential: 0.07 Bar for pilot, 0 Bar for direct acting

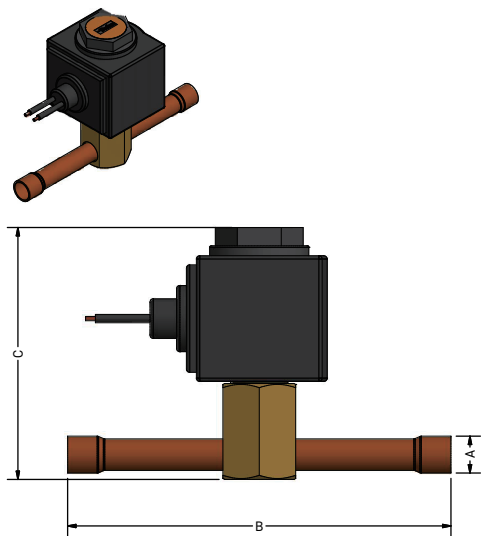
Valve type	Part Number	Connections		Cv	Kv	External Leakage	Internal Leakage	MOPD		MAX Working Pressure
		SAE	ODF					AC	DC	
RV3	RV3S2	-	1/4" ODF	0.2	0.2	2.8 gram/year (0.1 oz/year)	5cc/min@ 100PSI	30Bar (435PSI)	28Bar (400PSI)	45Bar (650PSI)
	RV3S3		3/8" ODF							
RV5	RV5S3	-	3/8" ODF	0.6	0.5		10cc/min@ 100PSI			
	RV5F2	1/4" SAE	-							
RV6	RV6S3	-	3/8" ODF	0.9	0.8		15cc/min@ 100PSI			
	RV6S4	-	1/2" ODF							
	RV6F3	3/8" SAE	-							
RV9	RV9S4	-	5/8" ODF	1.5	1.3		30cc/min@ 100PSI			
	RV9S5	-	5/8" ODF							
	RV9F4	1/2" SAE	-							
RV10	RV10S5	-	5/8" ODF	2.3	2.0		15cc/min@ 100PSI			
RV14	RV14S5	-	5/8" ODF	2.9	2.5					
	RV14S7	-	7/8" ODF							
	RV14F5	5/8" SAE	-							
RV19	RV19S7	-	7/8" ODF	4.6	4.0		30cc/min@ 100PSI			
	RV19S9	-	1-1/8" ODF							
RV25	RV25S9	-	1-1/8" ODF	7.8	6.7		100cc/min@ 100PSI			
	RV25S11	-	1-3/8" ODF							
RV35	RV35S9	-	1-1/8" ODF	13.7	11.8		100cc/min@ 100PSI			
	RV35S11	-	1-3/8" ODF							
	RV35S13	-	1-5/8" ODF							
RV43	RV43S13	-	1-5/8" ODF	23.6	20.4					
	RV43S17	-	2-1/8" ODF							

Valve type	NOMINAL LIQUID CAPACITIES Tons(kW) of Refrigerant					
	R22	R134a	R404A	R407C	R410A	R507
	Pressure Drop - psi(bar)					
	3(0.20)	2(0.14)	3(0.20)	3(0.20)	5(0.34)	3(0.20)
RV3	1.2(4.1)	0.8(3.1)	0.8(2.9)	1.1(3.9)	1.5(5.1)	0.7(2.6)
RV5	3.1(10.8)	2.3(8.1)	2.1(7.3)	2.9(10)	3.8(13.2)	2(7)
RV6	4.6(16.1)	3.6(12.5)	3.1(10.8)	4.2(14.8)	5.6(19.6)	3(10.5)
RV9	8(28.1)	6.2(21.5)	5.4(18.8)	7.3(25.7)	9.8(34.3)	5.2(18.1)
RV10	12.3(43.1)	9.4(33)	8.1(28.4)	11.3(39.6)	15(52.6)	8(28)
RV14	15.4(54.1)	11.7(41.1)	10.2(35.6)	14.1(49.6)	18.8(66)	10(34.9)
RV19	24.5(86.1)	18.7(65.5)	16.2(57)	22.6(79.4)	29.9(105.1)	15.9(55.9)
RV25	41.1(144.6)	31.3(110)	27.2(95.7)	37.8(132.7)	50.2(176.3)	26.6(93.6)
RV35	89.1(313.4)	66.6(234.3)	58.5(205.5)	81.5(286.4)	108.7(382.3)	57.3(201.6)
RV43	96.6(339.6)	75.5(265.3)	64.7(227.6)	89.6(315.1)	117.8(414.3)	63.2(222.1)

\*Liquid capacity is based on 40°F evaporating and 100°F liquid

Dimensional Drawing

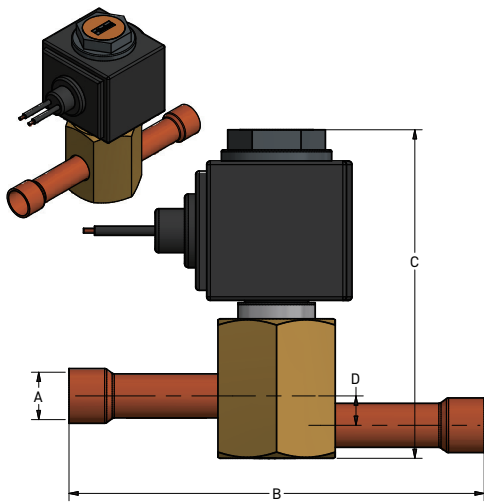
RV3



ODF Connection mode

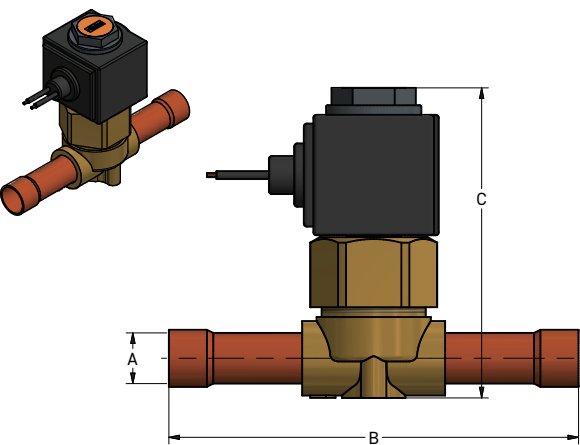
Model	Dimensions (mm)		
	A	B	C
RV3S2	6.45	88	76.1
RV3S3	9.6	115.8	76.1

RV5-RV9



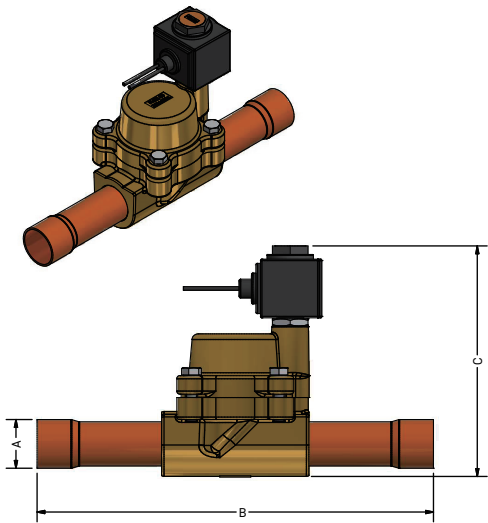
Model	Dimensions (mm)			
	A	B	C	D
RV5S3	9.6	115.8	76	8.5
RV6S3	9.6	115.8	84.7	8.0
RV6S4	12.9	115.8	84.7	8.0
RV9S4	12.9	112.9	89.5	8.0
RV9S5	16	112.9	89.5	8.0

RV10-RV25



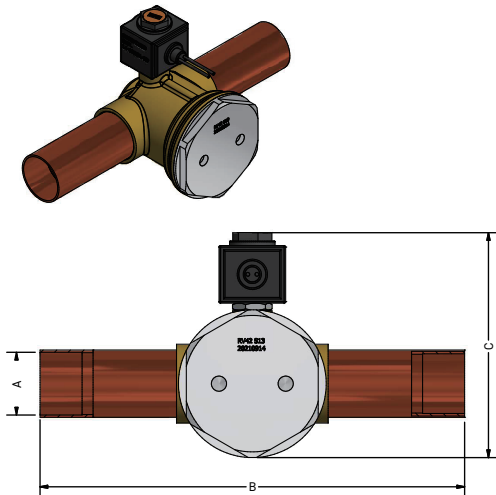
Model	Dimensions (mm)		
	A	B	C
RV10S5	16.0	129.0	97.8
RV14S5	16.0	129.0	97.8
RV14S7	22.4	129.0	97.8
RV19S7	22.4	150.0	105.7
RV19S9	28.8	150.0	105.7
RV25S9	28.8	156.0	107.4
RV25S11	35.1	156.0	107.4

RV35



	Dimensions (mm)		
Model	A	B	C
RV35S9	28.8	255.5	149
RV35S11	35.3	280.9	149
RV35S13	41.5	280.9	149

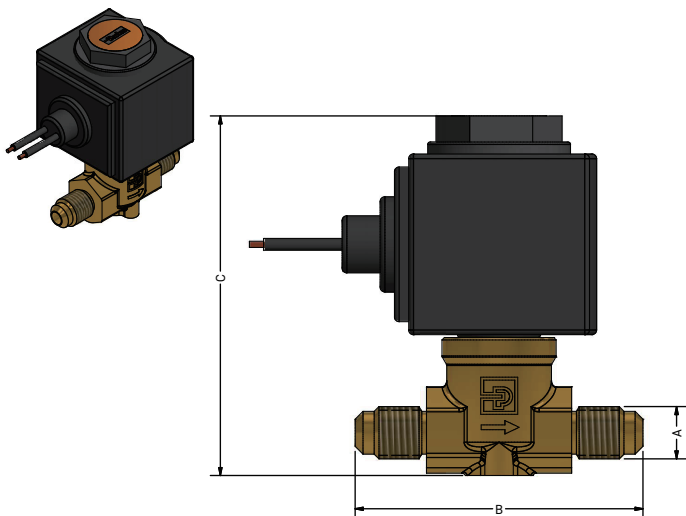
RV43



	Dimensions (mm)		
Model	A	B	C
RV43S13	41.5	280.9	148
RV43S17	54.3	280.9	148


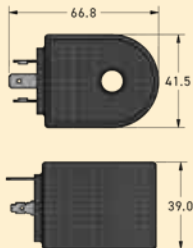

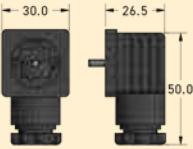

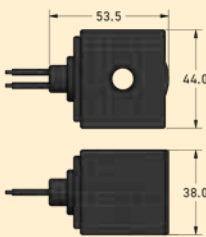
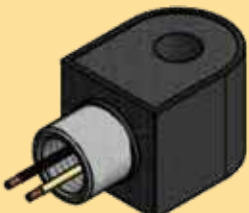
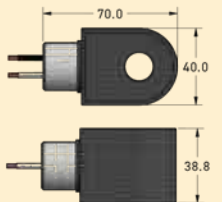
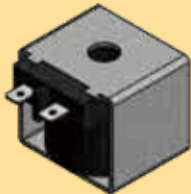
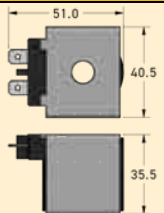
## SAE Connection mode

RV5-RV14



	Dimensions (mm)		
Model	A	B	C
RV5F2	1/4" SAE	60.5	75.9
RV6F3	3/8" SAE	63.5	75.6
RV9F4	1/2" SAE	76.0	80.2
RV14F5	5/8" SAE	94.4	90.5

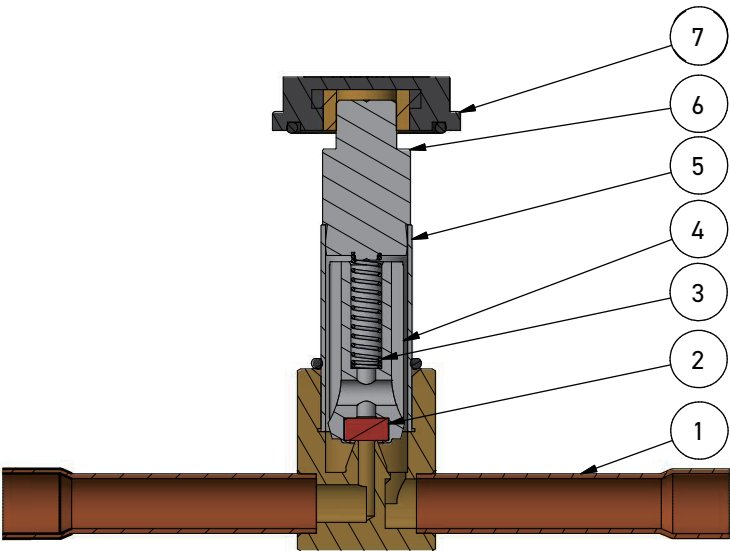
## Coil Specification

Coil Type	Picture	Part Number	Voltage	IP Grade	Insulation Grade	Watts(Cold)	Coil Dimensions
DIN		690012P0	24/50-60	65	F	11	
		6900122W	100/50 110-120/50-60				
		6900124P	220-240/50-60				
		690012C1	12V DC			22	
		690012C2	24V DC				
		690012C5	110V DC				
DIN Connector		C300456	N/A	N/A	N/A	N/A	
Lead Wire		690007P0	24/50-60	67	F	11	
		6900072W	100/50 110-120/50-60				
		6900074P	220-240/50-60				
		690007C1	12V DC			22	
		690007C2	24V DC				
		690007C5	110V DC				
Conduit Boss		690011P0	24/50-60	67	F	11	
		6900112W	100/50 110-120/50-60				
		6900114P	220-240/50-60				
		690011C1	12V DC			22	
		690011C2	24V DC				
		690011C5	110V DC				
Top Spade		690001P0	24/50-60	65	F	11	
		6900012W	100/50 110-120/50-60				
		6900014P	220-240/50-60				

Material Specification

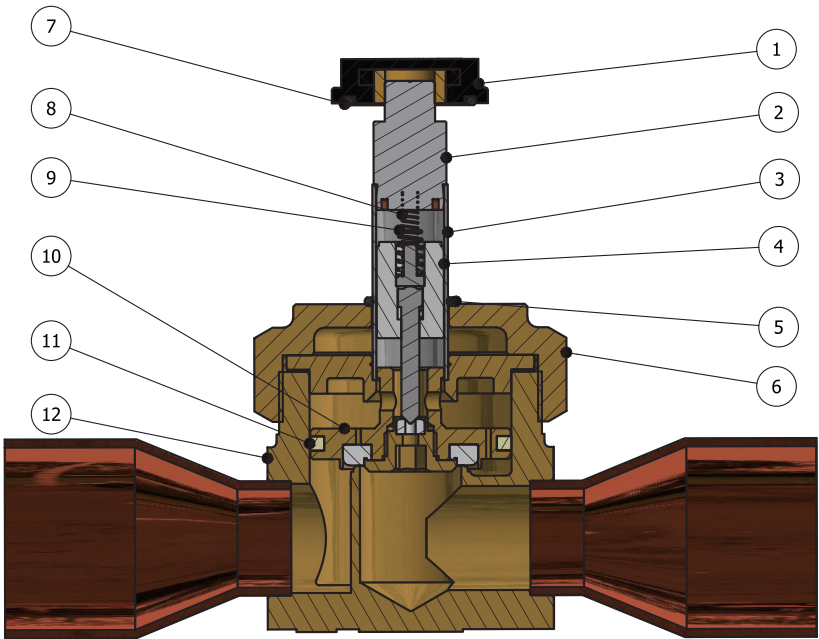
RV3 Series

Num.	Component
1	Body
2	Disc
3	Spring
4	Plunger
5	Tube
6	Stopper
7	Plastic nut



RV5-25 Series

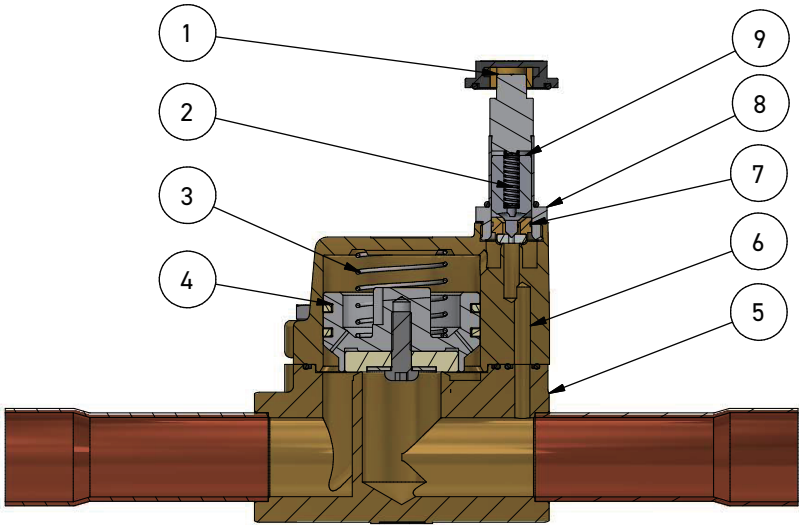
Num.	Component
1	Plastic nut
2	Stopper
3	Tube
4	Plunger
5	O-Ring
6	Cover Nut
7	O-Ring
8	Small Spring
9	Short Spring
10	Piston
11	Guide Ring
12	Body





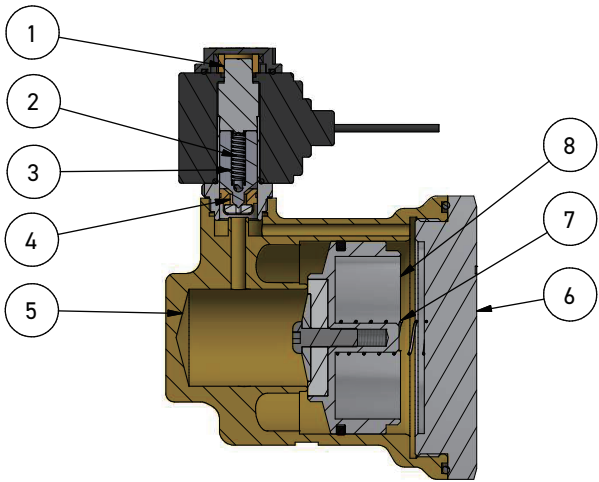
RV35 Series

Num.	Component
1	Stopper
2	Spring
3	Spring
4	Piston
5	Body
6	End cap
7	Piston
8	Sleeve
9	Plunger



RV43 Series

Num.	Component
1	Stopper
2	Spring
3	Plunger
4	Piston
5	Body
6	End cap
7	Spring
8	Piston





### **⚠ WARNING – USER RESPONSIBILITY**

**Failure or improper selection or improper use of the products described herein or related items can cause death, personal injury and property damage.**

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The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

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19-03-A ING-EN-9P- Climate Control



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