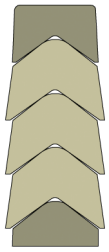
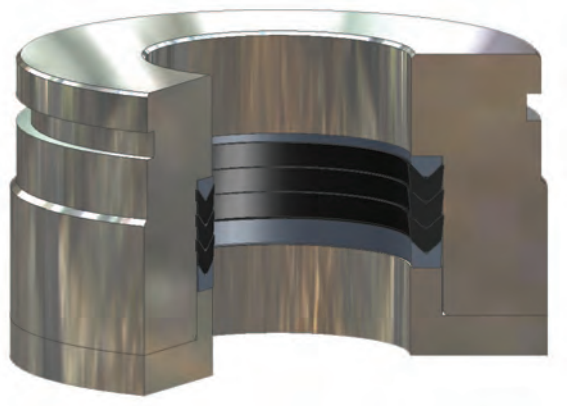
Spiral Vee Rings, Cut to Size Chevron Packing

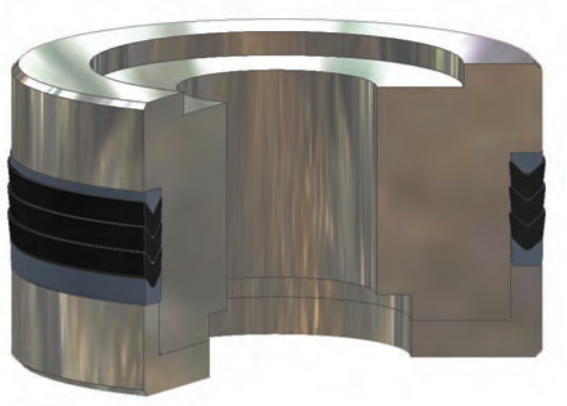
Parker Spiral Vee rings are precision formed rubber and combination rubber/fabric sealing products designed to protect equipment from leakage and costly down time. Parker Spiral Vee rings are designed to work in combination with adapters and shims. Adapters, which typically consist of rubber and plastic rings, are fitted to the top and/or bottom of the Vee ring stack to enhance sealing performance and prohibit extrusion. Rectangular cross-section discs, or "shims," are used to adjust the height of the Vee ring stack set to pre-existing groove depths. Spiral Vee rings, adapters and shims are engineered for use in rams and plungers, presses, forging hammers and other hydraulic applications. Also included are refuse trucks and telescoping systems that require consistent, cost-effective sealing. These products contribute to the safe and reliable operation of equipment in chemical processing, energy/oilfield and other industries. To ensure compatibility with the many organic (petroleum-based) and synthetic fluids used in hydraulic applications, Parker offers its Spiral Vee ring products, adapters and shims in a wide range of compounds.



Spiral Vee Cross-Section



Spiral Vee installed in Rod Gland



Spiral Vee installed in Piston Gland

Catalog EPS 5370/USA

Technical Data — Materials Matrix*†

Table 6-22. Material Codes

Vee Set Material Code	Adapters		Middle Rings	
	Description	Temperature Rating	Description	Temperature Rating
4050	Fabric/Neoprene	-45°F to 250°F (-43°C to 121°C)	Fabric/Neoprene	-45°F to 250°F (-43°C to 121°C)
4051	Fabric/Neoprene	-45°F to 250°F (-43°C to 121°C)	Fabric/Neoprene/ Homogeneous NBR	-45°F to 250°F (-43°C to 121°C)
4052	Fabric/Neoprene	-45°F to 250°F (-43°C to 121°C)	Nitrile	-30°F to 250°F (-34°C to 121°C)
4053	Fabric/FKM	-25°F to 450°F (-32°C to 232°C)	Fabric/FKM	-25°F to 450°F (-32°C to 232°C)
4054	Fabric/FKM	-25°F to 450°F (-32°C to 232°C)	Fabric/FKM/ Homogeneous FKM	-25°F to 450°F (-32°C to 232°C)
4055	Fabric/FKM	-25°F to 450°F (-32°C to 232°C)	FKM	-25°F to 450°F (-32°C to 232°C)

***Note:** Independent of Material Codes in Section 3.
†**Alternate Materials:** For applications that may require an alternate material, please contact your local Parker Seal representative.

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Table 6-23. Recommended Number of Middle Rings (Vees) per Set Based on Pressure

	Pressure			
	Up to 1,000 psi	1,000 to 2,000 psi	2,000 to 4,000 psi	4,000 to 6,000 psi
Minimum Number of Rings	3	4	5	6

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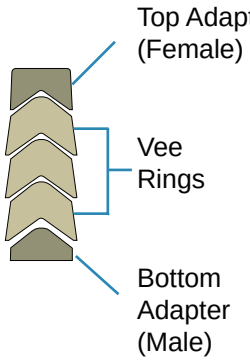

Part Number Nomenclature — Spiral Vee Profile

Table 6-24. Spiral Vee Profile — Inch

4	0	5	0	SVP	0	3	7	5	0	6	0	0	0	-	1	3	1	1
																	Vee Set Configuration	

- 4 Digit Vee Set Material Code Example: 4050 = Fabric Reinforced Neoprene (See Table 6-22)
- Profile
- Gland Depth (x1000) or Seal Nominal Radial Cross-Section Example: .375 x 1000 = 0375
- Seal Nominal I.D. (x1000) Example: 6.000 x 1000 = 06000
- Top (Female) Adapter
- Quantity of Vee Rings
- Bottom (Male) Adapter
- **Option:** Quantity of Homogeneous Rings (Omit if Not Required)

Steps in developing Spiral Vee part number:

1) Identify the material combination for the V-Packing Set from the material matrix.
2) SVP – Spiral V-Packing line callout.
3) Identify the nominal cross-section (0375 = .375").
4) Identify the nominal inner diameter (06000 = 6.000").
5) Identify the number and type of rings in the set:
   a) First digit is the number of top adapters (1 or 0).
   b) Second digit is the number of vees (as shown "3" = 3 vees).
   c) Number of homogeneous rubber vee rings. Omit if not required.
   d) Third digit is the number of bottom adapters (1 or 0).

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Bulk Length Availability — Spiral Vee Profile

Table 6-25. Spiral Vee Profile — Inch

Cross Section	Feet/ Spiral	I.D./ Range	Mandrel Sizes Available			
0.375"	49'	I.D.	6"	10"	16"	20"
		Range	4"-8"	8.1"-14"	14.1"-21"	21.1"+
0.500"	46'	I.D.	6"	12"	16"	20"
		Range	5"-10"	10.1"-16"	16.1"-23"	23.1"+
0.625"	62'	I.D.	6"	12"	18"	20"
		Range	6"-11"	11.1"-17"	17.1"-22"	22.1"+
0.750"	62'	I.D.	10"	12"	18"	20"
		Range	9"-12"	12.1"-16"	16.1-23"	23.1"+
.0875"	62'	I.D.		12"	16"	20"
		Range		11"-15"	15.1"-23"	23.1"+
1.000"	62'	I.D.			16"	20"
		Range			14"-23"	23.1"+

Contact your local Parker Seal representative for price and availability of bulk length Spiral Vee.

Stack Height Calculation — Spiral Vee Profile

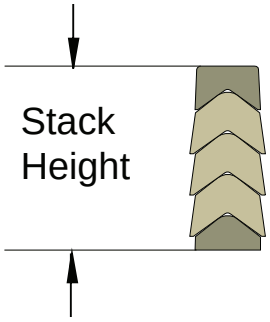

Table 6-26. Spiral Vee Dimensions — Inch

Cross-Section	Stack Height for Each Vee Ring		Height of Combined Top and Bottom Adapters	
Inches	Inches	Tolerance	Inches	Tolerance
0.375	0.220	±0.025	0.480	±0.030
0.500	0.300	±0.025	0.530	±0.030
0.625	0.370	±0.030	0.625	±0.030
0.750	0.405	±0.030	0.690	±0.030
0.875	0.500	±0.030	0.740	±0.030
1.000	0.540	±0.030	0.780	±0.030

NOTE: For sizes larger than those shown in the table, please contact your local Parker Seal representative.

Stack Height = (*[number of middle rings (Vees)]* X *[stack height for each vee ring (see Table 6-26)]*)
+ *[height of combined top and bottom adapters (see Table 6-26)]*

Example: 1-3-1 Vee Stack with 0.500" cross-section

Stack Height = ([3] X [.300])
([number of middle rings (Vees)] X [stack height for each vee ring (see Table 6-26)])

\+ [.530]
\+ *[height of combined top and bottom adapters (see Table 6-26)]*

= 1.430"