

VS Series Filter-Driers

Type VS



Parker's VS Series filter-driers are ideal for protecting air-conditioning systems, compressors, and valves from the harmful effects of moisture, acid, and solid debris.

The compact design reduces lay-in length requirements and reduces refrigerant charge requirements. Multiple size products are available to optimize contaminant control. This product is ideal for OEM air-conditioning applications and private label opportunities.

Specifications:

- 650 psi (45 bar) Maximum Rated Pressure
- 100% molecular sieve to maximize water adsorption
- 10 micron outlet filter (at 50% efficiency)
- 500 hour salt spray per ASTM B117
- UL Recognized component File SA1756 – SMGT2/SMGT8, cURus
- Multiple patents pending
- RoHS and REACH Compliant
- No CE marking according to Art. 3.3 PED 97/23 EC.



Features and Benefits:

- High capacity solid core design for excellent moisture and acid protection in air conditioning systems
- High filtration capacity for solid debris protection
- Unique, compact shape minimizes pressure drop and reduces refrigerant requirements
- Solid copper fittings for easy brazing
- High performance epoxy powder paint for excellent corrosion protection

Refrigerant Holding Capacities:

SERIES SIZE	OUNCES OF REFRIGERANT BY WEIGHT at 100°F			GRAMS (g) OF REFRIGERANT BY WEIGHT at 38°C		
	R-22	R-407C	R-410A	R-22	R-407C	R-410A
VS-040	1.3	1.1	1.1	35	33	31
VS-080	2.6	2.3	2.2	72	67	63
VS-160	5.2	4.6	4.4	144	134	126



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Dimensions

MODEL		CONNECTION SIZE Inches	OVERALL LENGTH Inches (mm)		SOLDER SOCKET DEPTH Inches (mm)	LAY-IN LENGTH Inches (mm)	BODY DIAMETER Inches (mm)
SAE FLARE	ODF SOLDER		SAE FLARE	ODF SOLDER			
—	VS-042S	1/4	—	2.75 (69.9)	0.35 (8.9)	2.05 (52.1)	2.23 (56.6)
—	VS-043S	3/8	—	2.91 (73.9)	0.42 (10.7)	2.07 (52.5)	
VS-083	—	3/8	4.26 (108.2)	—	—	4.26 (108.2)	2.77 (70.4)
—	VS-083S	3/8	—	3.38 (85.9)	0.42 (10.7)	2.54 (64.5)	
VS-084	—	1/2	4.64 (117.9)	—	—	4.64 (117.90)	
—	VS-084S	1/2	—	3.64 (92.5)	0.55 (14.0)	2.54 (64.5)	
VS-163	—	3/8	4.85 (123.2)	—	—	4.85 (123.2)	3.46 (87.9)
—	VS-163S	3/8	—	3.97 (100.8)	0.42 (10.7)	3.13 (79.4)	
VS-164	—	1/2	5.23 (132.8)	—	—	5.23 (132.8)	
—	VS-164S	1/2	—	4.23 (107.4)	0.54 (13.7)	3.15 (80.0)	
VS-165	—	5/8	5.63 (143.0)	—	—	5.63 (143.0)	
—	VS-165S	5/8	—	4.49 (114.0)	0.66 (16.8)	3.17 (80.4)	

Selection Recommendations

MODEL	RATINGS AT AHRI STANDARD CONDITIONS													SELECTION RECOMMENDATIONS Tons (kW)
	DROPS OF WATER CAPACITY*								FLOW CAPACITY Tons at 1 psi ΔP (kW at 0.07 bar ΔP)				FILTRATION CAPACITY** Grams at 5 psi (0.34 bar) ΔP	
	R-22		R-134a		R-407C		R-410A		R-22	R-134a	R-407C	R-410A		
	75°F 25°C	125°F 52°C	75°F 25°C	125°F 52°C	75°F 25°C	125°F 52°C	75°F 25°C	125°F 52°C						
VS-042S	108	80	113	99	88	39	60	50	1.5 (5.3)	1.4 (4.9)	1.3 (4.7)	1.4 (4.9)	3	up to 5 (17.5)
VS-043S									4.8 (16.8)	4.4 (15.4)	4.4 (15.4)	4.6 (16.1)		
VS-083	204	151	212	186	166	73	120	100	4.2 (14.7)	3.8 (13.3)	3.8 (13.3)	4.0 (14.0)	6	3 thru 7.5 (10.5 thru 26)
VS-083S									5.0 (17.6)	4.6 (16.1)	4.5 (16.0)	4.8 (16.8)		
VS-084									6.4 (22.5)	5.9 (20.7)	5.9 (20.7)	6.2 (21.8)		
VS-084S									8.5 (29.8)	7.8 (27.4)	7.8 (27.4)	8.2 (28.8)		
VS-163	440	325	458	401	358	158	240	200	4.4 (15.4)	4.0 (14.0)	4.0 (14.0)	4.2 (14.7)	10	5 thru 12 (17.5 thru 42)
VS-163S									5.1 (17.9)	4.7 (16.5)	4.6 (16.3)	4.9 (17.2)		
VS-164									7.8 (27.4)	7.1 (24.9)	7.1 (24.9)	7.5 (26.3)		
VS-164S									10.4 (36.5)	9.5 (33.3)	9.5 (33.3)	10.0 (35.1)		
VS-165									10.4 (36.5)	9.5 (33.3)	9.5 (33.3)	10.0 (35.1)		
VS-165S									10.9 (38.2)	10.0 (35.1)	9.9 (34.9)	10.5 (36.9)		

* At 50 ppm EPD per AHRI Standard 710 except R-22 at 60 ppm EPD

** Per ASHRAE Standard 63.2 and AHRI 715230

20 drops = 1 gram

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