

VVorldSeries[™] Liquid Line Filter Driers

Virginia KMP initiated the WorldSeries™ concept to bring together the products manufactured in the USA and Europe, at a time when Global changes in the use of refrigerants were at their most extreme. This resulted in the introduction of the WLD, WEU and WSC liquid line driers.



The revolution in refrigerant use is still in progress and large differences in governmental legislation and individual country preferences, together with certain manufacturer standards, make it necessary for the filter drier to perform ever more demanding tasks.

New HFC systems, and particularly retrofits of existing CFC or HCFC plants, also require an entirely new approach in the handling of system fluids.

Unwanted particles present throughout the system, have an increased opportunity to move from their home and cause damage to other system components.

It is now more important than ever to use a filter drier with greater moisture and filtration capacity in order to ensure maximum system protection.

The introduction of higher pressure refrigerants such as R410A and R744, have made it increasingly necessary to utilise an enclosure capable of withstanding the higher pressures.

During 2001 Virginia KMP introduced the WEU product combining the features of the WLD and WAH, incorporated with a steel shell of higher pressure rating.

WEU Filtration

Both primary and secondary filters use long filament glass fibres, giving filtration down to 95% efficiency at 20 micron particle size.

WEU Desiccant

To ensure no conflict with the demands of any of the compressor manufacturers and to maximise the moisture holding capability of the drier, the WEU series uses 100% modified 3Å molecular sieve. By using only molecular sieve of this type there is no potential for hydrolysis or bi-polar attraction of lubricant additives.

WEU Capacity

By maximising the water capacity, it creates the greatest factor of safety for the contractor, helping to overcome the difficulties of dealing with the hygroscopic nature of POE lubricant.

WEU Compatibility

All materials are fully compatible with all CFC, HCFC, HFC, HC and CO2 refrigerants and associated lubricants.

WEU Connections

Available in both solder and male flare sizes.

WEU Paint

Epoxy powder blue, giving protection to 750 hours salt spray.

WEU - PED / CE

The physical size of the WEU series allows the product to be manufactured under the PED category of 'Sound Engineering Practice' which does not require the 'CE' marking.

WEU - UL

The full line is approved by the American standard Underwriters Laboratories, within file number SA12220.

Liquid Refrigerant Holding Capacity

Grams @ 40°C

Series	R22	R134a	R404A	R407C	R410A	
WEU 03	96	97	82	91	84	
WEU 05	113	114	97	107	99	
WEU 08	230	231	196	217	200	
WEU 16	286	289	245	271	250	
WEU 30	723	729	618	684	630	
WEU 41	992	1000	848	939	865	
WEU 75	1466	1477	1253	1387	1278	

WEU Flow Capacity

Flow Capacity (kW) Based on 0.07 bar pressure drop across the drier

	R22	R134a	R404A	R407C	R410A	
WEU0306mmS	6.4	5.9	4.3	6.1	6.4	
WEU032F (S)	6.4	5.9	4.3	6.1	6.4	
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WEU0506mmS	6.9	6.4	4.6	6.6	6.9	
WEU0510mmS	17.9	16.6	12.0	17.0	17.9	
WEU052F (S)	6.9	6.4	4.6	6.6	6.9	
WEU053F (S)	17.9	16.6	12.0	17.0	17.9	
WEU0806mmS	7.5	7.0	5.0	7.1	7.5	
WEU0810mmS	18.4	17.1	12.3	17.5	18.4	
WEU0812mmS	27.9	25.9	18.7	26.5	27.9	
WEU082F (S)	7.5	7.0	5.0	7.1	7.5	
WEU083F (S)	18.4	17.1	12.3	17.5	18.4	
WEU084F (S)	27.9	25.9	18.7	26.5	27.9	
WEU1606mmS	7.5	7.0	5.0	7.1	7.5	
WEU1610mmS	20.4	18.9	13.7	19.4	20.4	
WEU1612mmS	36.8	34.1	24.7	35.0	36.8	
WEU162F (S)	7.5	7.0	5.0	7.1	7.5	
WEU163F (S)	20.4	18.9	13.7	19.4	20.4	
WEU164F (S)	36.8	34.1	24.7	35.0	36.8	
WEU165F (S)	49.5	45.9	33.2	47.0	49.5	
WEU3010mmS	20.9	19.4	14.0	19.9	20.9	
WEU3012mmS	40.3	37.4	27.0	38.3	40.3	
WEU303F (S)	20.9	19.4	14.0	19.9	20.9	
WEU304F (S)	40.3	37.4	27.0	38.3	40.3	
WEU305F (S)	51.3	47.6	34.4	48.7	51.3	
WEU307S	62.2	57.7	41.7	59.1	62.2	
	40 -	05 -	00.5			
WEU4112mmS	42.3	39.2	28.3	40.2	42.3	
WEU414F (S)	42.3	39.2	28.3	40.2	42.3	
WEU415F (S)	54.7	50.7	36.6	52.0	54.7	
WEU417S	77.1	71.5	51.7	73.2	77.1	
	47.5		04.0			
WEU754S	47.5	44.0	31.8	45.1	47.5	
WEU755S	60.5	56.1	40.5	57.5	60.5	
WEU756S	69.4	64.3	46.5	65.9	69.4	
WEU757S	82.1	76.1	55.0	78.0	82.1	
WEU759S	119.4	110.7	80.0	113.4	119.4	

Tested to ARI 710-86

WEU Flow Capacity

Flow Capacity (kW) Based on 0.14 bar pressure drop across the drier

	R22	R134a	R404A	R407C	R410A		
WEU0306mmS	10.8	10.0	7.2	10.3	10.8		
WEU032F (S)	10.8	10.0	7.2	10.3	10.8		
WEU0506mmS	10.8	10.0	7.2	10.3	10.8		
WEU0510mmS	25.8	23.9	17.3	24.5	25.8		
WEU052F (S)	10.8	10.0	7.2	10.3	10.8		
WEU053F (S)	25.8	23.9	17.3	24.5	25.8		
WEU0806mmS	10.8	10.0	7.2	10.3	10.8		
WEU0810mmS	25.8	23.9	17.3	24.5	25.8		
WEU0812mmS	38.1	35.3	25.5	36.2	38.1		
WEU082F (S)	10.8	10.0	7.2	10.3	10.8		
WEU083F (S)	26.5	24.6	17.8	25.2	26.5		
WEU084F (S)	40.2	37.3	26.9	38.2	40.2		
WEU1606mmS	10.8	10.0	7.2	10.3	10.8		
WEU1610mmS	25.8	23.9	17.3	24.5	25.8		
WEU1612mmS	36.8	34.1	24.7	35.0	36.8		
WEU162F (S)	10.8	10.0	7.2	10.3	10.8		
WEU163F (S)	26.5	24.6	17.8	25.2	26.5		
WEU164F (S)	40.2	37.3	26.9	38.2	40.2		
WEU165F (S)	55.6	51.5	37.3	52.8	55.6		
WEU3010mmS	30.1	27.9	20.2	28.6	30.1		
WEU3012mmS	40.3	37.4	27.0	38.3	40.3		
WEU303F (S)	29.4	27.3	19.7	27.9	29.4		
WEU304F (S)	42.7	39.6	28.6	40.6	42.7		
WEU305F (S)	58.1	53.9	38.9	55.2	58.1		
WEU307S	74.1	68.7	49.6	70.4	74.1		
			05.0				
WEU4112mmS	52.2	48.4	35.0	49.6	52.2		
WEU414F (S)	54.6	50.6	36.6	51.9	54.6		
WEU415F (S)	61.1	56.6	40.9	58.0	61.1		
WEU417S	78.9	73.1	52.9	75.0	78.9		
VA/EL 17E 46	E4./	FO /	27.7	F1.0	E4.4		
WEU754S	54.6	50.6	36.6	51.9	54.6		
WEU755S	61.1	56.6	40.9	58.0	61.1		
WEU756S	69.4	64.3	46.5	65.9	69.4		
WEU757S	118.4	109.8	79.3	112.5	118.4		
WEU759S	172.2	159.6	115.4	163.6	172.2		

Tested to ARI 710-86



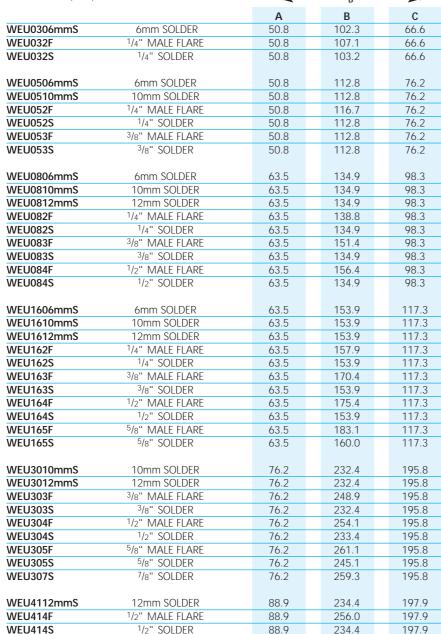
WEU Moisture Capacities

Moisture Capacity (gr water)

	R134a		R	22	R404A		R407C		R410A	
	24°C	52°C								
	EPD 75ppm		EPD 60ppm		EPD 30ppm		EPD 30ppm		EPD 60ppm	
WEU 03	5	4	5	4	6	5	5	4	4	3
WEU 05	8	7	8	7	10	9	8	7	8	7
WEU 08	19	15	17	14	22	18	17	15	15	12
WEU 16	25	22	22	17	29	24	22	18	19	15
WEU 30	53	44	46	39	57	48	47	40	40	34
WEU 41	75	62	67	58	84	71	68	55	57	49
WEU 75	132	113	121	103	151	129	121	105	103	86

WEU Liquid Line Driers

Dimensions (mm)



5/8" MALE FLARE

5/8" SOLDER

7/8" SOLDER

1/2" SOLDER

5/8" SOLDER

3/4" SOLDER

7/8" SOLDER

11/8" SOLDER

88.9

88.9

88.9

88.9

88.9

88.9

88 9

88.9

263.5

247.1

261.4

320.3

333.0

334.5

347.2

355.9

WEU415F

WEU415S

WEU417S

WEU754S

WEU755S

WEU756S

WEU757S

WEU759S

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