



# FOCUSED ON PURIFICATION

Parker Water Separators | WS Series



ENGINEERING YOUR SUCCESS.





## FOCUSED ON CONTAMINANT REMOVAL

Parker WS water separators have been designed for the efficient removal of bulk liquid contamination from compressed air.

Compressed air purification equipment must deliver uncompromising performance and reliability while providing the right balance of air quality with the lowest cost of operation. Many manufacturers offer products for the filtration and purification of contaminated compressed air, which are often selected only upon their initial purchase cost, with little or no regard for the air quality they provide, the cost of operation throughout their life or indeed their environmental impact. When purchasing purification equipment, delivered air quality, the overall cost of ownership and the equipment's environmental impact must always be considered.

### Parker WS Series

#### Benefits

- Protects coalescing filters from bulk liquid contamination.
- Helps provide air quality in accordance with ISO 8573-1:2001 the international standard for compressed air quality.
- High liquid removal efficiencies at all flow conditions.
- Suitable for all compressed air applications.
- Suitable for all compressor types, including variable flow.
- Low pressure losses for low operational costs.
- Low lifetime costs.
- Helps reduce the release of CO<sub>2</sub> into the environment.
- Lloyds & CRN registered.

#### Features

- High specification carbon for improved service intervals.
- Sealed external oil container for easy oil disposal.
- Additional oil containers for simple maintenance.
- Robust, corrosion resistant, polyethylene construction, includes ribbing for extra strength.



# Technical Data

Grade	Models	Drain Type	Min Operating Pressure		Max Operating Pressure		Min Operating Temp		Max Operating Temp	
			psi g	bar g	psi g	bar g	°F	°C	°F	°C
WSP	010ANFX - 055JNFX	Float	15	1	232	16	35	2	176	80
WSP060	60KNFX	Float	15	1	232	16	35	2	150	66
DH-WSA	800-F - 7200-F	Float	15	1	232	16	35	2	140	60

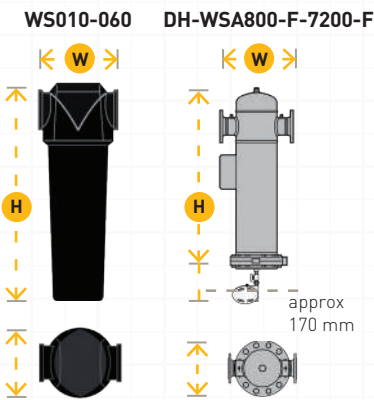
## Product Selection

Stated flows are for operation at 100 psi g (7 bar g) with reference to 68°F (20°C), 14.5 psi g (1 bar g), 0% relative water vapor pressure.

	Model	Pipe Size	scfm	m3/min	m3/hr	L/S	Height (H)		Width (W)		Depth (D)		Weight	
							ins	mm	ins	mm	ins	mm	lbs	kg
							<b>Cast Aluminum Range</b>							
	WSP010ANFX-US	1/4" NPT	21	0.6	36	10	7.09	180	2.99	76	2.6	66	1.34	0.61
	WSP010BNFX-US	3/8" NPT	21	0.6	36	10	7.09	180	2.99	76	2.6	66	1.34	0.61
	WSP010CNFX-US	1/2" NPT	21	0.6	36	10	7.09	180	2.99	76	2.6	66	1.34	0.61
	WSP015CNFX-US	1/2" NPT	85	2.4	144	40	9.39	238.5	3.5	97	3.29	83.5	2.58	1.16
	WSP020DNFX-US	3/4" NPT	85	2.4	144	40	9.39	238.5	3.5	97	3.29	83.5	2.47	1.12
	WSP025DNFX-US	3/4" NPT	233	6.6	396	110	10.9	277	4.72	129	4.5	114.5	4.86	2.21
	WSP025ENFX-US	1" NPT	233	6.6	396	110	10.9	277	4.72	129	4.5	114.5	4.86	2.21
	WSP030GNFX-US	1 1/2" NPT	233	6.6	396	110	14.45	367	4.72	129	4.5	114.5	5.91	2.68
	WSP035GNFX-US	1 1/2" NPT	742	21	1260	350	20.9	531	6.46	170	6.1	156	15.2	6.9
	WSP040HNFX-US	2" NPT	742	21	1260	350	24.5	623	6.46	170	6.1	156	16.1	7.3
	WSP045INFX-US	2 1/2" NPT	742	21	1260	350	24.5	623	6.46	170	6.1	156	15.65	7.1
	WSP050INFX-US	2 1/2" NPT	1695	48	2880	800	29.3	745	7.56	205	7.2	183	22.71	10.3
	WSP055JNFX-US	3" NPT	1695	48	2880	800	36.8	935	7.56	205	7.2	183	33.73	15.3
	WSP060KNFX-US	4" NPT	2119	60	3600	1000	33.3	847	16.54	420	11.1	282	98.11	44.5
<b>Carbon Steel Range</b>														
	DH-WSA800-F	3" Flg	1700	48.1	2888	802	41.5	1123	15	381	7.5	191	112	50.8
	DH-WSA1000-F	4" Flg	2100	59.5	3568	991	48.6	1234	18	457	9.0	229	180	81.6
	DH-WSA1800-F	6" Flg	3780	107	6422	1784	54.8	1392	24	610	11.0	279	257	116.6
	DH-WSA3000-F	8" Flg	6300	178.4	10704	2973	CF	CF	CF	CF	CF	CF	CF	CF
	DH-WSA4800-F	10" Flg	10080	285.4	17126	4757	CF	CF	CF	CF	CF	CF	CF	CF
	DH-WSA7200-F	12" Flg	15120	428.2	25689	7136	CF	CF	CF	CF	CF	CF	CF	CF

## Flow Correction Factors

Line Pressure	psi g	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232
	bar g	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Correction Factor		4.00	2.63	2.00	1.59	1.33	1.14	1.00	0.94	0.89	0.85	0.82	0.79	0.76	0.73	0.71	0.68



### Applying Correction Factors

To correctly select a water separator model, the flow rate of the separator must be adjusted for the minimum operating pressure of the system.

1. Obtain the minimum operating pressure and maximum compressed air flow rate at the inlet of the water separator.
2. Select the correction factor for minimum operating pressure from the CFP table (always round down, e.g for 5.3 bar, use 5 bar correction factor)
3. Calculate the minimum filtration capacity: Minimum Filtration Capacity = Compressed Air Flow Rate x CFP
4. Using the minimum filtration capacity, select a separator model from the flow rate tables above (WS selected must have a flow rate equal to or greater than the minimum filtration capacity)

### Notes

1. Fitted with automatic drain as standard.
2. If ordering without float drain, substitute N (not X) in place of F as shown in the following example: WSP020DNX-US: F = Float Drain; N = No Drain



# Worldwide Filtration Manufacturing Locations

## North America

### Compressed Air Treatment

#### Industrial Gas Filtration and Generation Division

Lancaster, NY  
716 686 6400  
[www.parker.com/igfg](http://www.parker.com/igfg)

Haverhill, MA  
978 858 0505  
[www.parker.com/igfg](http://www.parker.com/igfg)

### Engine Filtration

#### Racor

Modesto, CA  
209 521 7860  
[www.parker.com/racor](http://www.parker.com/racor)

Holly Springs, MS  
662 252 2656  
[www.parker.com/racor](http://www.parker.com/racor)

### Hydraulic Filtration

#### Hydraulic & Fuel Filtration

Metamora, OH  
419 644 4311  
[www.parker.com/hydraulicfilter](http://www.parker.com/hydraulicfilter)

Laval, QC Canada  
450 629 9594  
[www.parkerfarr.com](http://www.parkerfarr.com)

Velcon  
Colorado Springs, CO  
719 531 5855  
[www.velcon.com](http://www.velcon.com)

### Process Filtration

#### domnick hunter Process Filtration SciLog

Oxnard, CA  
805 604 3400  
[www.parker.com/processfiltration](http://www.parker.com/processfiltration)

### Water Purification

#### Village Marine, Sea Recovery, Horizon Reverse Osmosis

Carson, CA  
310 637 3400  
[www.parker.com/watermakers](http://www.parker.com/watermakers)

## Europe

### Compressed Air Treatment

#### domnick hunter Filtration & Separation

Gateshead, England  
+44 (0) 191 402 9000  
[www.parker.com/dhfns](http://www.parker.com/dhfns)

#### Parker Gas Separations

Etten-Leur, Netherlands  
+31 76 508 5300  
[www.parker.com/dhfns](http://www.parker.com/dhfns)

#### Hiross Airtek

Essen, Germany  
+49 2054 9340  
[www.parker.com/hzfd](http://www.parker.com/hzfd)

Padova, Italy  
+39 049 9712 111  
[www.parker.com/hzfd](http://www.parker.com/hzfd)

### Engine Filtration & Water Purification

#### Racor

Dewsbury, England  
+44 (0) 1924 487 000  
[www.parker.com/rfde](http://www.parker.com/rfde)

#### Racor Research & Development

Stuttgart, Germany  
+49 (0)711 7071 290-10

### Hydraulic Filtration

#### Hydraulic Filter

Arnhem, Holland  
+31 26 3760376  
[www.parker.com/hfde](http://www.parker.com/hfde)

Urjala, Finland  
+358 20 753 2500

#### Condition Monitoring Parker Kittiwake

West Sussex, England  
+44 (0) 1903 731 470  
[www.kittiwake.com](http://www.kittiwake.com)

### Process Filtration

#### domnick hunter Process Filtration Parker Twin Filter BV

Birtley, England  
+44 (0) 191 410 5121  
[www.parker.com/processfiltration](http://www.parker.com/processfiltration)

## Asia Pacific

### Australia

Castle Hill, Australia  
+61 2 9634 7777  
[www.parker.com/australia](http://www.parker.com/australia)

### China

Shanghai, China  
+86 21 5031 2525  
[www.parker.com/china](http://www.parker.com/china)

### India

Chennai, India  
+91 22 4391 0700  
[www.parker.com/india](http://www.parker.com/india)

### Parker Fowler

Bangalore, India  
+91 80 2783 6794  
[www.johnfowlerindia.com](http://www.johnfowlerindia.com)

### Japan

Tokyo, Japan  
+81 45 870 1522  
[www.parker.com/japan](http://www.parker.com/japan)

### Korea

Hwaseon-City  
+82 31 359 0852  
[www.parker.com/korea](http://www.parker.com/korea)

### Singapore

Jurong Town, Singapore  
+65 6887 6300  
[www.parker.com/singapore](http://www.parker.com/singapore)

### Thailand

Bangkok, Thailand  
+66 2186 7000  
[www.parker.com/thailand](http://www.parker.com/thailand)

## Latin America

### Parker Comercio Ltda. Filtration Division

Sao Paulo, Brazil  
+55 12 4009 3500  
[www.parker.com/br](http://www.parker.com/br)

### Pan American Division

Miami, FL  
305 470 8800  
[www.parker.com/panam](http://www.parker.com/panam)

## Africa

Aeroporto Kempton Park, South Africa  
+27 11 9610700  
[www.parker.com/africa](http://www.parker.com/africa)

© 2018 Parker Hannifin Corporation. Product names are trademarks or registered trademarks of their respective companies

BRO-PKR\_WS-102017



Parker Hannifin Corporation  
Industrial Gas Filtration  
and Generation Division  
4087 Walden Avenue  
Lancaster, NY 14086  
phone 800 343 4048  
[www.parker.com/igfg](http://www.parker.com/igfg)



State of California ONLY  
**WARNING: Proposition 65**  
The products described herein can expose you to chemicals known to the State of California to cause cancer or reproductive harm.  
For more information: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)