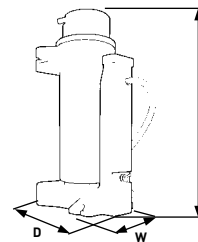


# Technical Data

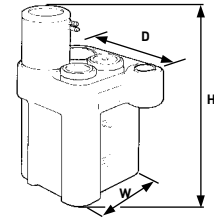
Model	ES2100	ES2150	ES2200	ES2300	ES2400	ES2500	ES2600
<b>Inlet Connections</b>	1 x 1/2" 1 x 1/4"	1 x 1/2" 1 x 1/4"	1 x 1/2" 1 x 1/4"	1 x 1/2" 3 x 1/4"	1 x 1/2" 3 x 1/4"	1 x 1/2" 3 x 1/4"	1 x 1/2" 3 x 1/4"
<b>Outlet Hose Connections</b>	19mm (3/4")	25mm (1")	19mm (3/4")	25mm (1")	25mm (1")	25mm (1")	25mm (1")
<b>Settlement Tank Capacity</b>	N/A	60 litres	75 litres	125 litres	185 litres	355 litres	485 litres
	N/A	16 US G	20 US G	33 US G	49 US G	94 US G	128 US G
<b>Max. Pressure</b>	16 bar g (232 psi g)						
<b>Min/ Max Temperature</b>	°C	5 to 35	5 to 35	5 to 35	5 to 35	5 to 35	5 to 35
	°F	41 to 95	41 to 95	41 to 95	41 to 95	41 to 95	41 to 95
<b>Material (Re-cyclable)</b>	Polyethylene						

## Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight			
	mm	ins	mm	ins	mm	ins	Empty		Full	
							kg	lbs	kg	lbs
ES2100	842	33.1	250	9.8	315	12.4	6	13	24.5	154
ES2150	810	31.9	350	13.8	430	16.9	10	22	78.5	173
ES2200	805	31.7	350	13.8	450	17.7	12	26	93.5	206
ES2300	1195	47.0	500	19.7	800	31.5	27	59	159	350
ES2400	1195	47.0	650	26.6	800	31.5	36	79	217	477
ES2500	1535	60.4	700	27.6	985	38.8	70	154	400	880
ES2600	1535	60.4	1000	39.4	1010	39.8	97	214	550	1210



ES2100



ES2150 to ES2600

## Product Selection

Correct selection is critical for the operation of oil/water separators. Increased condensate flow through an oil/water separator reduces settlement time in the main tank, increases oil carryover to the carbon stage & reduces contact time with the carbon. The overall effect of incorrect sizing is poor outlet water quality, reduced carbon filter life and the potential for overflowing.

Capacities shown in this literature assume installation in two of the world's major climatic conditions. Should the oil/water separator be installed in conditions other than those shown, please contact your local Parker outlet or approved distributor/agent for correct sizing.

### Oil types

To simplify the selection, lubricant classifications have been split into three bands depending upon their ability to separate within a static type oil/water separator.

**Band A:** Turbine Oil, Additive Free Oil

**Band B:** Mineral  
Poly alpha olefins (PAO)  
Trimethylolpropane Ester (TMP),  
Pentaerythrityl Ester (PE)

**Band C:** Diesters, Triesters,  
Polyoxyalkylene glycol (PAG)

### Inseparable using Static Separation

**Techniques:** Automatic transmission fluid (ATF)

### Drain type

The condensate should be removed from the compressed air system using a drainage method that does not cause emulsification of the condensate and is appropriate for the unit. Usual methods include :

- Level Operated Electronic Drain
- Float Drain
- Timed Solenoid Drain\*

Parker recommends the use of the ED3000 Series range of condensate drains. Manual and Thermodynamic Disc trap drains must not be used with the ES2000 Series oil/water separators.

**\*If the use of Timed Solenoid Drains is unavoidable, steps must be taken to reduce the air loss as this has an emulsifying effect on the condensate.**

### Refrigeration dryers

A refrigeration dryer installed in a compressed air system can significantly increase the condensate produced. The oil/water separator must be sized appropriately to treat the extra condensate produced. Flow capacities within this literature are shown both with and without a refrigeration dryer installed.

### Important Note:

Additives blended into the lubricants to prevent bacterial growth, rusting, corrosion, and to promote emulsification, such as detergents etc., can have an impact on the separating process. Static oil/water separators are unable to separate stable emulsions or oils that are miscible in water. Additionally, these units will not totally separate lubricants containing: Emulsifying Agents; Glycol additives; or Polyglycol based coolants.

There are many factors which play a part in the selection of a static oil/water separator, with ambient conditions of the installation and oil type being the most important. Capacities shown in this literature assume installation in two of the worlds major climatic conditions. Should the oil/water separator be installed in conditions other than those shown, please contact your local Parker outlet or approved distributor/agent for correct sizing.

**Climate Condition 1**

<b>System Conditions</b>			
Ambient Temperature at Compressor Inlet:	25°C (77°F)	Refrigeration Dryer Dewpoint If Fitted:	2°C (35°F)
Relative Humidity:	65%	Min. System Temp. Without Refrigeration Dryer:	30°C (86°F)
Compressor Discharge Temperature:	35°C (95°F)	System Pressure:	7 bar g (102psi g)
			Outlet quality: <20mg/l oil in water*

No Refrigeration Dryer Installed in System		Oil Type											
		Band A Turbine, Additive Free				Band B Mineral, PAO, TMP, PE				Band C Diesters, Triesters, PAG			
Compressor Type	Model	L/s	m³/min	m³/hr	cfm	L/s	m³/min	m³/hr	cfm	L/s	m³/min	m³/hr	cfm
Rotary Screw, Vane	ES2100	20	1.2	74	43	17	1.0	62	36	14	0.9	51	30
	ES2150	59	3.5	211	124	50	3.0	179	106	40	2.4	146	86
	ES2200	90	5.4	325	191	77	4.6	276	162	62	3.7	224	132
	ES2300	127	7.6	456	268	106	6.4	383	225	87	5.2	314	185
	ES2400	252	15.1	909	535	212	12.7	764	450	174	10.5	628	370
	ES2500	501	30.1	1804	1062	425	25.5	1530	900	346	20.8	1247	734
	ES2600	997	59.8	3590	2113	849	51.0	3057	1800	689	41.4	2482	1461

Refrigeration Dryer Installed in System		Oil Type											
		Band A Turbine, Additive Free				Band B Mineral, PAO, TMP, PE				Band C Diesters, Triesters, PAG			
Compressor Type	Model	L/s	m³/min	m³/hr	cfm	L/s	m³/min	m³/hr	cfm	L/s	m³/min	m³/hr	cfm
Rotary Screw, Vane	ES2100	15	0.9	55	33	13	0.8	46	27	10	0.6	38	22
	ES2150	44	2.6	158	93	37	2.2	134	79	30	1.8	109	64
	ES2200	67	4.1	243	143	57	3.4	207	122	47	2.8	168	99
	ES2300	95	5.7	341	201	79	4.8	286	169	65	3.9	235	138
	ES2400	189	11.3	680	400	159	9.5	572	337	130	7.8	470	277
	ES2500	375	22.5	1351	795	318	19.1	1145	674	259	15.6	934	549
	ES2600	746	44.8	2687	1582	635	38.1	2288	1347	516	31.0	1858	1093

**Climate Condition 2**

<b>System Conditions</b>			
Ambient Temperature at Compressor Inlet:	35°C (95°F)	Refrigeration Dryer Dewpoint If Fitted:	2°C (35°F)
Relative Humidity:	85%	Min. System Temp. Without Refrigeration Dryer:	40°C (104°F)
Compressor Discharge Temperature:	45°C (113°F)	System Pressure:	7 bar g (102psi g)
			Outlet quality: <20mg/l oil in water*

No Refrigeration Dryer Installed in System		Oil Type											
		Band A Turbine, Additive Free				Band B Mineral, PAO, TMP, PE				Band C Diesters, Triesters, PAG			
Compressor Type	Model	L/s	m³/min	m³/hr	cfm	L/s	m³/min	m³/hr	cfm	L/s	m³/min	m³/hr	cfm
Rotary Screw, Vane	ES2100	8	0.5	28	16	6	0.4	23	14	5	0.3	19	11
	ES2150	22	1.3	80	47	19	1.1	68	40	15	0.9	55	33
	ES2200	34	2.1	123	73	29	1.7	105	62	24	1.4	85	50
	ES2300	48	2.9	173	102	40	2.4	145	85	33	2.0	119	70
	ES2400	96	5.7	345	203	80	4.8	290	171	66	4.0	238	140
	ES2500	190	11.4	684	403	161	9.7	580	341	131	7.9	473	278
	ES2600	378	22.7	1361	801	322	19.3	1159	682	261	15.7	941	554

Refrigeration Dryer installed in system		Oil Type											
		Band A Turbine, Additive Free				Band B Mineral, PAO, TMP, PE				Band C Diesters, Triesters, PAG			
Compressor Type	Model	L/s	m³/min	m³/hr	cfm	L/s	m³/min	m³/hr	cfm	L/s	m³/min	m³/hr	cfm
Rotary Screw, Vane	ES2100	6	0.4	23	13	5	0.3	19	11	4	0.3	16	9
	ES2150	18	1.1	64	38	15	0.9	55	32	12	0.7	45	26
	ES2200	27	1.7	99	58	23	1.4	84	50	19	1.1	69	40
	ES2300	39	2.3	139	82	32	1.9	117	69	27	1.6	96	56
	ES2400	77	4.6	278	163	65	3.9	234	137	53	3.2	192	113
	ES2500	153	9.2	551	324	130	7.8	467	275	106	6.4	381	224
	ES2600	305	18.3	1097	645	259	15.6	934	550	210	12.6	758	446

For systems using 1 or 2 stage piston/reciprocating compressors multiply compressor flow by 1.4 and select a separator from screw compressor flow rates shown, ensuring due consideration is given to oil type.

\* For outlet quality levels of 10mg/l or 5mg/l please contact Parker for correct product selection.