



Outotec Larox[®] PF

Outotec Larox automatic pressure filters (PF) are recessed plate membrane filters in which the chambers lie horizontally. The individual filter plates have single-sided filtration areas of 1.6, 2.5, 6 and 9 m² depending on the filter model and operate up to 16 bar pressing pressure.

Outotec offers comprehensive technical sales, testing and maintenance services to select the optimum filter, assist with plant design, and ensure the filter runs efficiently and reliably.

Benefits

- High capacity
- Dry filter cake
- Efficient solids wash
- Flexible operation
- High reliability
- Robust design
- Fully automatic
- Over 1 000 PF filters sold
- Low energy and water consumption

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Filter plates

The plates are stacked vertically to give a total filtration area between 1.6 and 252 m². Filter capacity can be expanded by adding plates. A single filter cloth zigzags between the filter plates. Many types of Outotec OEM filter cloth are available for different applications.

Guaranteed cake discharge

The single filter cloth on Outotec Larox PF automatic pressure filters transports the cakes out of every chamber, completely, every cycle. This eliminates the need for manual assistance.

Fully automatic operation

Outotec Larox PF pressure filters operate fully automatically, either with stand alone panel and integrated PLC or through a distributed control system. The automation extends beyond simple filter sequencing to process control to achieve consistent results under varying process conditions.

Filter cloth washing & management

Every cycle, the filter cloth passes through high pressure water sprays to remove adhering and embedded solids. This maintains cloth permeability, ensures consistent filter performance with every chamber having equal cloth resistance, and extends cloth life. The single cloth system simplifies logistics, maintenance and allows complete cloth inspection without a shutdown.

Outotec Larox PF 1.6 series

Compact, simple to install pressure filter for smaller duties (45 and 60mm chambers available, 60mm up to 11m²)

Outotec Larox PF 1.6		1.6	3.2	4.7	6.3	7.9	9.5	11	12.6
Filtration area	m ²	1.6	3.2	4.7	6.3	7.9	9.5	11	12.6
Filter plates	pcs	1	2	3	4	5	6	7	8
Filter plate size	mm/m ²	900 x 1 750 / 1.6							
Main dimensions, length	mm	3 650							
Main dimensions, width	mm	2 500							
Main dimensions, height (60 mm chambers)	mm	2 300	2 300	2 400	2 500	2 600	2 700	2 900	-
Weight	t	10.5	11	11.5	12	12.5	13	13.5	14
Required floor area	m ²	36							
Maximum pressure	bar	16							
Filter cloths, width	mm	1 050							
Filter cloths, length	m	17		22		28		33	
Electric motors (400 V, 50 Hz)									
Hydraulic unit	kW-r/min	18.5 - 1 500							
Pressing water pump	kW-r/min	4 - 3 000				11 - 3 000			
Pressing water tank	l	500				1 500			
Oil tank volume	l	250							



Outotec Larox PF 12 & 15 series

Mid-sized filters designed for simple maintenance and with corrosion protection options
(45 and 60 chambers available)

Outotec Larox PF 12		9.5/9.5	12.5/16	16/16	16/19	19/19	22/25	25/25	28/32	32/32	
Filtration area	m ²	9.45	12.6	15.75	15.75	18.9	22.05	25.2	28.35	31.5	
Filter plates	pcs	6	8	10	10	12	14	16	18	20	
Filter plate size	mm/m ²	900 x 1 750 / 1.6									
Main dimensions, length	mm	4 250									
Main dimensions, width	mm	3 600					3 800				
Main dimensions, height (60 mm chambers)	mm	2 600	3 100		3 600		4 100		4 600		
Weight	t	10.9	12.0	12.7	13.5	14.2	16.1	16.8	17.4	18.1	
Required floor area	m ²	39.5									
Maximum pressure	bar	16									
Filter cloths, width	mm	1 050									
Filter cloths, length	m	21.5	27.5	33	34	38.5	44.5	49.5	55	60.5	
Electric motors (400 V, 50 Hz)											
Hydraulic unit	kW-r/min	18.5 - 1 500									
Cloth centering	kW-r/min	0.55 - 1 500									
Pressing water pump	kW-r/min	11 - 3 000					15 - 3 000				
Pressing water tank	l	1 500					3 000				
Oil tank volume	l	150									

Outotec Larox PF 15		15	20	25	30	35	40	45	50		
Filtration area	m ²	15	20	25	30	35	40	45	50		
Filter plates	pcs	6	8	10	12	14	16	18	20		
Filter plate size	mm/m ²	1 010 x 2 470 / 2.5									
Main dimensions, length	mm	5 100									
Main dimensions, width	mm	3 900									
Main dimensions, height (60 mm chambers)	mm	4 000	4 000	4 000/4 600		4 600	4 600	5 950	5 950	5 950	
Weight	t	28	29	30/32		33	34	38	39	40	
Required floor area	m ²	60 (10 m x 6 m)									
Maximum pressure	bar	16									
Filter cloths, width	mm	1 180									
Filter cloths, length	m	29	35	41/42		49	54	61	67	74	
Electric motors (400 V, 50 Hz)											
Hydraulic unit	kW-r/min	22 - 1500									
Pressing water pump	kW-r/min	18.5 - 3 000					37 - 3 000				
Pressing water tank	l	3 000					6 000				
Oil tank volume	l	400									

Outotec Larox PF 48 series

Mid to high capacity filter designed for simple maintenance (33, 45 and 60mm chambers available, 60mm up to 144m²)

Outotec Larox PF 48		48	60	72	84	96	108	120	132	144	156	168	
Filtration area	m ²	48	60	72	84	96	108	120	132	144	156	168	
Filter plates	pcs	8	10	12	14	16	18	20	22	24	26	28	
Filter plate size	mm/m ²	1 500 x 4 010 / 6.0											
Main dimensions, length	mm	6 800											
Main dimensions, width	mm	5 040											
Main dimensions, height	mm	5 170			5 860			6 340		6 920		7 610	
Weight	t	59	62	65	72	74	81	84	90	93	99	102	
Required floor area	m ²	110											
Maximum pressure	bar	16											
Filter cloth width	m	1.7											
Length	m	55	65	75	85.5	95.5	106	116	128	136	148	158	
Electric motors (400 V, 50 Hz)													
Hydraulic unit	kW-r/min	90 - 1 500						110 - 1 500					
Oil tank volume	l	630											

Outotec Larox PF 60 series

High capacity, heavy duty filter for concentrators (45, 60 and 75mm chambers available, 75mm up to 132m²)

Outotec Larox PF 60		60	72	84	96	108	120	132	144
Filtration area	m ²	60	72	84	96	108	120	132	144
Filter plates	pcs	10	12	14	16	18	20	22	24
Filter plate size	mm/m ²	1 500 x 4 010 / 6.0							
Main dimensions, length	mm	6 800							
Main dimensions, width	mm	5 040							
Main dimensions, height	mm	5 120		5 820		6 520		7 220	
Weight	t	68.5	71.5	77.0	80.0	85.5	88.5	94.0	97.0
Required floor area	m ²	110							
Maximum pressure	bar	16							
Filter cloths, width	m	1.7							
Filter cloths, length	m	62.5	73.5	84.5	95	105.5	116.5	128	136
Electric motors (400 V, 50 Hz)									
Hydraulic unit	kW-r/min	90 - 1 500				110 - 1 500			
Oil tank volume	l	630							

Outotec Larox PF 180 series

High capacity filter with 50% more filtration area (45, 60 and 75mm chambers available)

Outotec Larox PF 180		162	180	198	216	234
Filtration area	m ²	162	180	198	216	234
Filter plates	psc	18	20	22	24	26
Filter plate size	mm/m ²	1500 x 6010 / 9.0				
Main dimensions, length	mm	9400				
Main dimensions, width	mm	5400	5400	5400	5400	5400
Main dimensions, height	mm	7725	7725	7725	8450	8450
Weight (without auxiliary equipment)	t	131	134	138	146	150
Required floor area	m ²	160				
Maximum pressure	bar	12				
Filter cloths, width	m	1.73				
Filter cloths, length	m	148	160	172	188	200
Electric motors (400 V, 50 Hz)						
Hydraulic unit	kW-r/min	110 + 30 kW - 1500				
Oil tank volume	l	800				

Efficient solid-liquid separation technology leads to both economical and environmental benefits. Outotec Larox filters and filtration solutions are designed in such a way that they help to achieve significant savings in energy and/or water consumption. Efficient filtration also leads to better quality waste water, thus reducing the environmental burden.

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