

# MasoSine Certa process pumps



## FEATURES AND BENEFITS

- Gentle product handling preserves high quality of product
- Impressive suction capability: -0.85 bar (vacuum) / -12.3 psi (atm)
- Almost zero pulsation
- Outstanding energy efficient pumping principle
- Bi-directional running
- Only one shaft and one seal system
- Different port orientations available
- Two year warranty



*Watson-Marlow... Innovation in Full Flow*

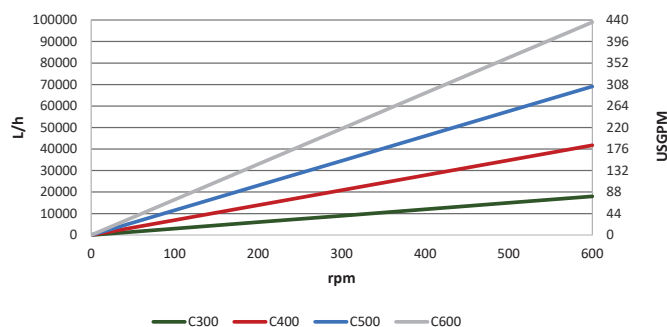
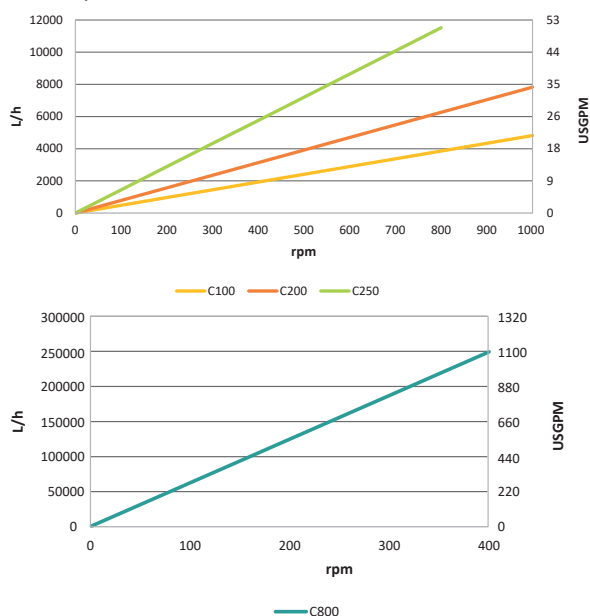
## TECHNICAL DATA

Technical Data															
Model	Maximum particle size		Volume per revolution		Speed	Maximum flow		Maximum pressure		Maximum temperature		Shaft diameter		Shaft height	
	mm	inch	litre	US gallons	rpm	l/h	US gal/min	bar	psi	C	F	mm	inch	mm	inch
Certa 100	13	0.51	0.08	0.021	1000	4,800	21.1	10	145	100	212	28	0.98	95	3.74
Certa 200	18	0.71	0.13	0.034	1000	7,800	34.2	10	145	100	212	28	0.98	109.5	4.31
Certa 250	22	0.87	0.24	0.063	800	11,520	50.5	15	217	100	212	28	0.98	150	5.91
Certa 300	30	1.18	0.50	0.132	600	18,000	78.9	15	217	100	212	50	1.97	170	6.69
Certa 400	38	1.50	1.16	0.305	600	41,760	183.2	15	217	100	212	50	1.97	200	7.87
Certa 500	50	1.97	1.92	0.505	600	69,120	303.2	15	217	100	212	50	1.97	250	9.84
Certa 600	60	2.36	2.75	0.724	600	99,000	434.2	15	217	100	212	65	2.56	255	10.04
Certa 800	100	3.94	10.64	2.811	400	255,360	1124.3	15	217	100	212	110	4.33	405	15.94

## PERFORMANCE

### Performance curves

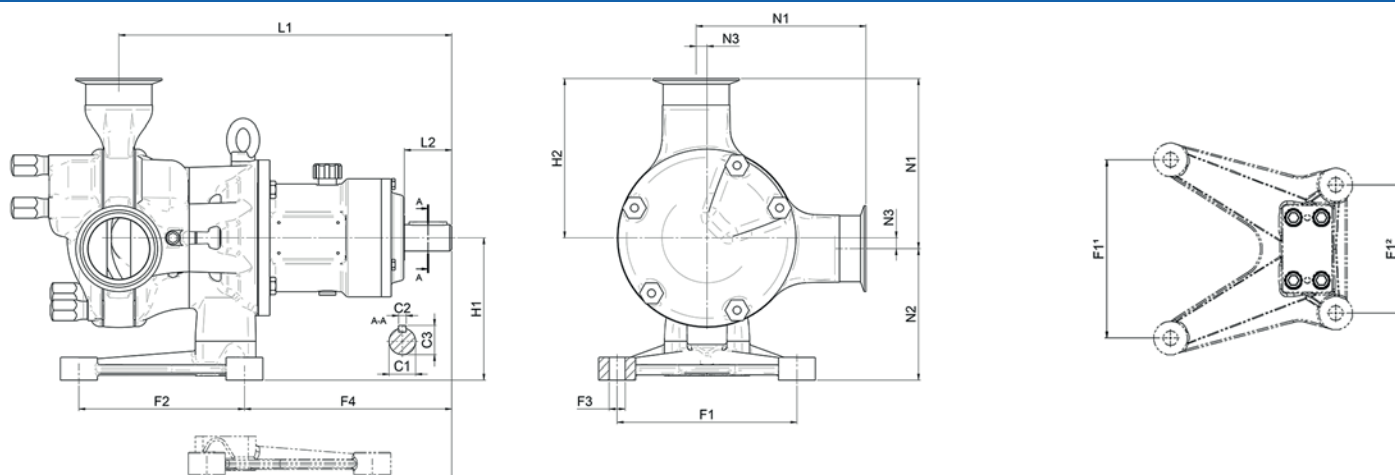
These performance curves show the theoretical flow without consideration of slip.



## MATERIALS OF CONSTRUCTION

Component	Material
Housing	Stainless Steel 316L
Bearing frame	Stainless Steel 304
Rotor	A494/CY5SnBiM
Gate	Polyamide
Seals / gaskets in Wet-End	FKM or EPDM
Seal faces in mechanical seal	SSIC
CUP in mechanical seal	PTFE
Other material data available on request	

## DIMENSIONS



### Pump size

Model	Nozzles						Foot										Length				Height				Coupling					
	N1		N2		N3		F1		F2		F3		F4		F5		L1		L2		H1		H2		C1		C2		C3	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
C100	139	5.47	85	3.35	10	0.39	120	4.72	135	5.31	Ø12	Ø0.47	143	5.63	57	2.24	265	10.43	50	1.97	95	3.74	129	5.08	Ø28	Ø1.10	8	0.31	31	1.22
C200	155	6.10	99.5	3.92	10	0.39	120	4.72	135	5.31	Ø12	Ø0.47	167.5	6.59	81.5	3.21	298.5	11.75	50	1.97	109.5	4.31	145	5.71	Ø28	Ø1.10	8	0.31	31	1.22
C250	191.5	7.54	138.5	5.45	11.5	0.45	190	7.48	175	6.89	Ø17	Ø0.67	219	8.62	84	3.31	352	13.86	50	1.97	150	5.91	180	7.08	Ø28	Ø1.10	8	0.31	31	1.22
C300	237.5	9.35	152.5	6.00	17.5	0.69	250	9.84	215	8.46	Ø20	Ø0.79	285	11.22	154	6.06	455.5	17.93	80	3.15	170	6.69	220	8.66	Ø50	Ø1.97	14	0.55	53.5	2.11
C400	323.5	12.74	169	6.65	31	1.22	266.5	10.49	254	10.00	Ø21	Ø0.83	301	11.85	169	6.65	513.5	20.22	77	3.03	200	7.87	292.5	11.52	Ø50	Ø1.97	14	0.55	53.5	2.11
C500	326.5	12.85	225	8.86	25	0.98	320/230	12.6/9.06	295	11.61	Ø26	Ø1.02	323	12.72	129.5	5.10	564	22.20	77	3.03	250	9.84	301.5	11.87	Ø50	Ø1.97	14	0.55	53.5	2.11
C600	343	13.50	227	8.94	28	1.10	320/230	12.6/9.06	295	11.61	Ø26	Ø1.02	362.5	14.27	169	6.65	638.5	25.14	110	4.33	255	10.04	315	12.40	Ø65	Ø2.56	18	0.71	69	2.72
C800	535	21.06	367	14.45	38	1.50	480	18.9	500	19.69	Ø32	Ø1.26	372	14.65	72	2.83	807	31.77	145	5.71	405	15.94	497	19.57	Ø110	Ø4.33	28	1.10	116	4.57

## POSSIBLE NOZZLE ORIENTATIONS

10-02	12-03	02-04*	03-06	04-08	06-09	08-10*	09-12

\*Note: According to EHEDG regulations, the pump head should always be completely self-draining. In a standard installation this can only be assured in the 02-04 or 08-10 nozzle positions.

## OPTIONS AND ACCESSORIES

- Pump jacketing available to maintain the duty fluid temperature
- Static and dynamic flush systems available
- Single mechanical seal or single mechanical seal with flush
- Double mechanical seal, either flushed only or pressurized
- Flush and double mechanical seal can be retrofitted without any modification

All flow rates shown were obtained pumping water at 20C (68F) with zero suction and delivery heads.  
Disclaimer: The information contained in this document is believed to be correct but Watson-Marlow Limited accepts no liability for any errors it contains and reserves the right to alter specifications without notice.  
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Process Pumps

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