

SERIE C Mouvex Technology

Eccentric disc pump

Seal free design

- Seal free means leak free. Designed without mechanical seal, packing or magnets, the C series eliminates leakage and reduces maintenance time.

CIP & SIP abilities

- The stainless steel version is designed to be flushed and cleaned in place without disassembling.

Sanitary & Food applicable

- The stainless steel models are ideal for sanitary applications, carry 3A approval certification and are designed per EHEDG recommendations.



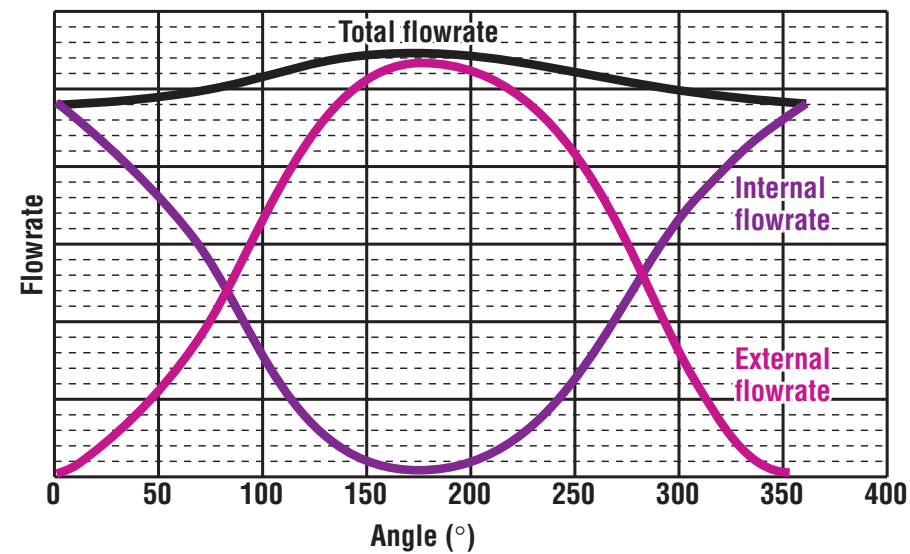
Chemical applicable

- The range of C pumps are in conformity with ATEX certification.



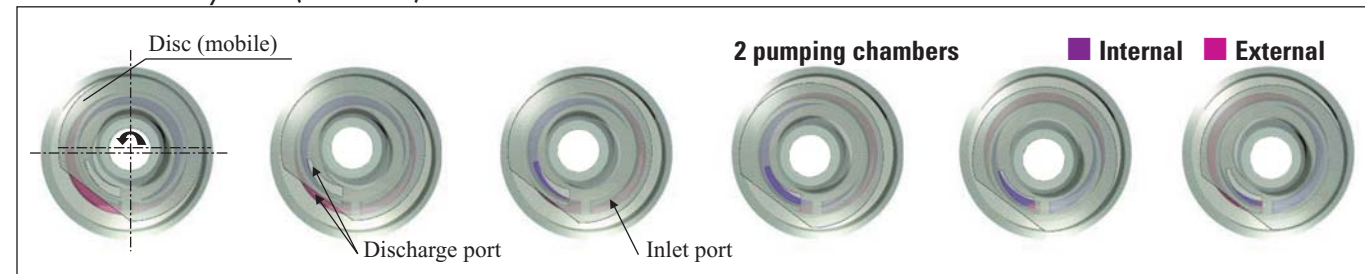
SERIE C - Mouvex Technology - Eccentric disc pump

◆ Low pulsation effect



● Mouvex Technology

Disc face to the cylinder (front view)



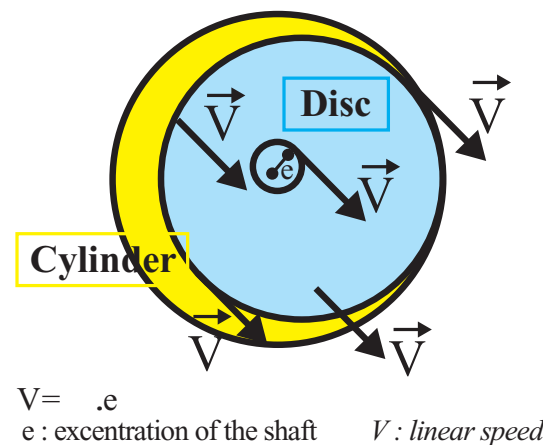
Disc face to the cylinder (cross section)



● Low shearing

Displacement of the disc in the cylinder

- The disc has an eccentric motion (driven by an eccentric shaft).
- Each point of the disc has the same linear speed.
- We get a circular translation.
- The mouvex technology allows a flowrate with low linear speed.

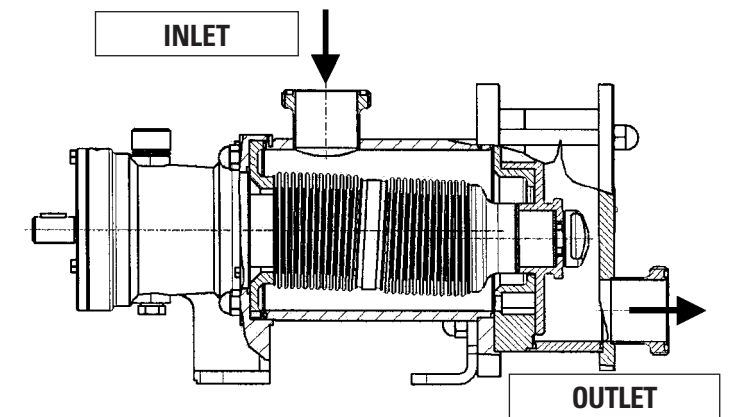


$$V = \omega \cdot e$$

e : excentration of the shaft V : linear speed

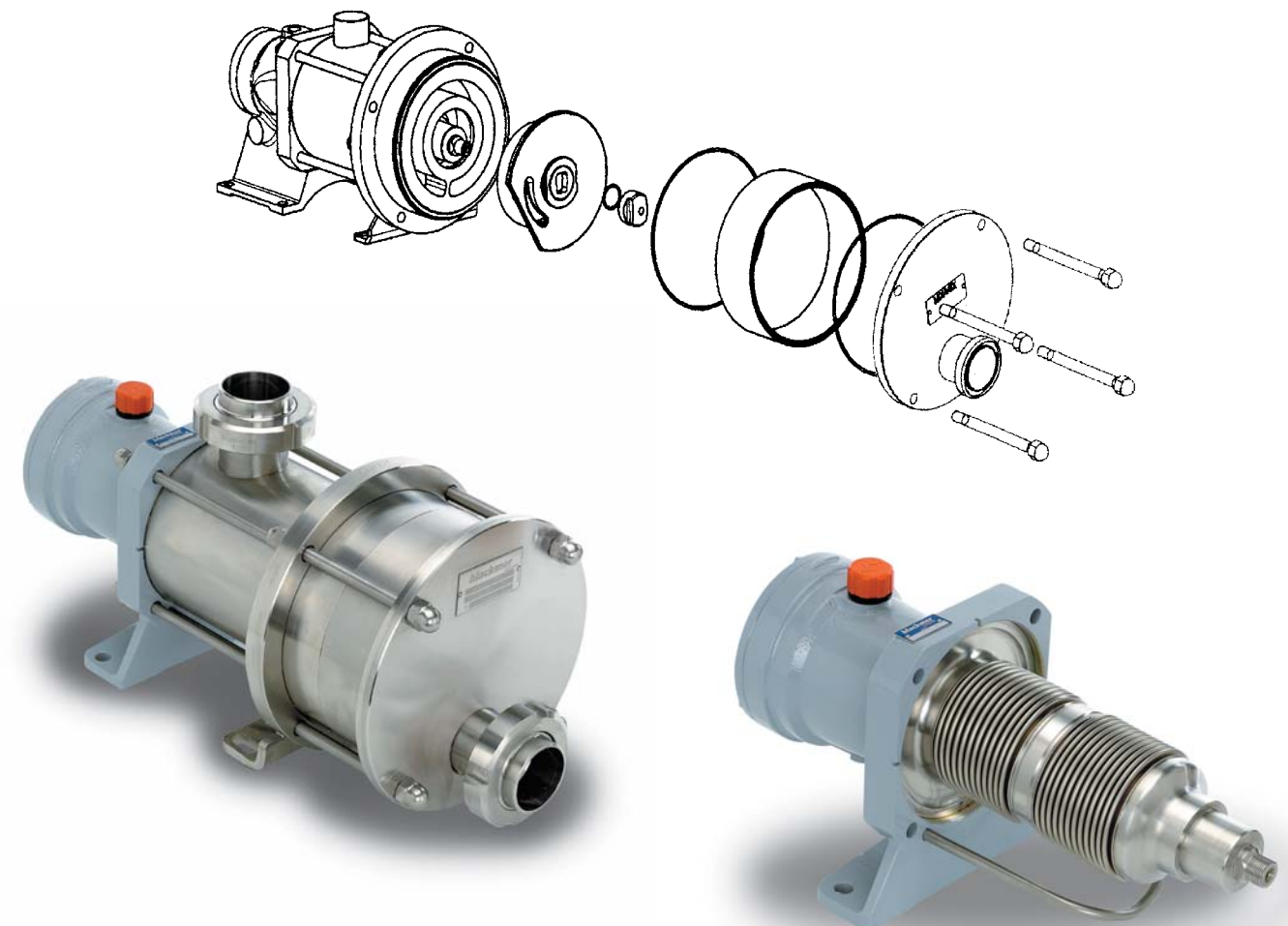
● Main advantages

- Self-priming with strong suction power
- Ability to clear the pipes
- Ability to run dry
- Low shear
- Maintenance of the delivery/pressure performance over time due to automatic disc/cylinder adjustment
- Outstanding volumetric efficiency
- Pumped product constantly renewed
- Ability to pump low and high viscosity products
- Output not affected by viscosity variation
- Low linear speed

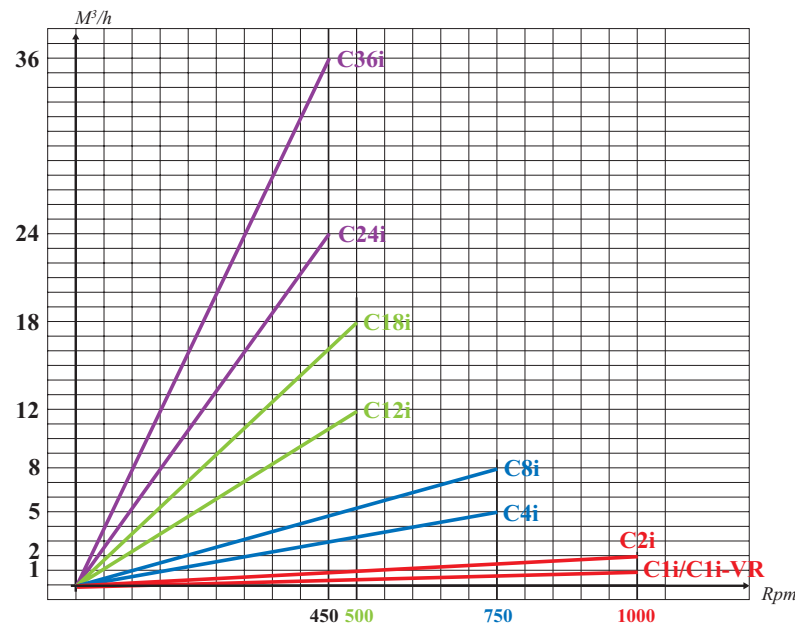


C SERIES (cross section)

● Pump without mechanical seal (seal free design)



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BELLOWS : 316 Ti Stainless steel
 DISC : "actéon" Stainless steel
 CYLINDER : 316 L Stainless steel
 BODYCASE : 316 L Stainless steel

SEAL : FDA Viton (L gasket)
 Viton O'Ring
 Encapsulated teflon
 Téflon (L gasket)

PORT : SMS, DIN, CLAMP, IDF...
 Flanges PN16, PN20

Stainless steel construction :

C Series Pump	C1i (C1i-VR)	C2i (C2i-VR)	C4i	C8i	C12i	C18i	C24i	C36i	C4i-HT	C8i-HT	C12i-HT	C18i-HT
Displacements (liters)	0,016	0,033	0,108	0,178	0,411	0,617	0,95	1,42	0,108	0,178	0,411	0,617
Max. outputs (m³/h)	1	2	5	8	12	18	24	36	5	8	12	18
Max. T° (°C) continuous	100	100	100	100	100	100	100	100	150	150	150	150
Max. pressure (bar)	9	9	9	5	9	6	9	6	9	6	9	6
Max. speed (Rpm)	1000	1000	750	750	500	500	450	450	750	750	500	500
Particle passage* (mm³)	2	2	5	5	15	15	20	20	5	5	15	15
Opening size (Suct/Disch) (mm)	40	40	50	50	60	60	70	70	50	50	60	60
CIP/SIP (120° C)	YES (only with SS construction)											

*no hard particles

Options



High temperature

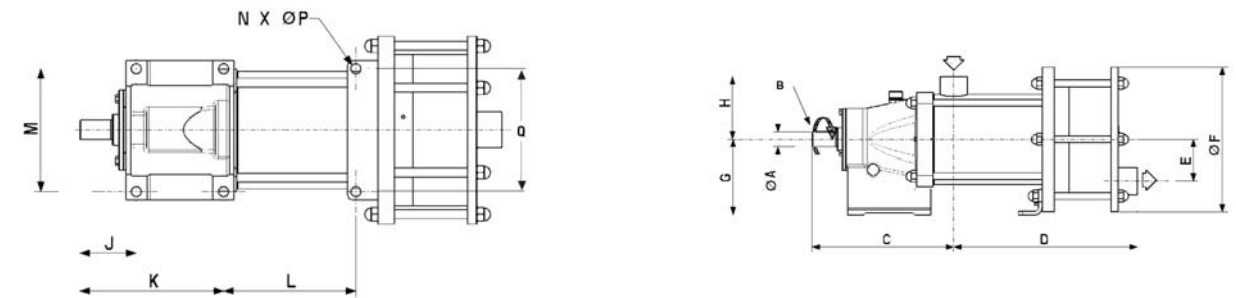


Heating jacket

Stainless steel construction :

C Series Pump	C1i (C1i-VR)	C2i (C2i-VR)	C4i	C8i	C12i	C18i	C24i	C36i
A	19	19	20	20	35	35	38	38
B	6	6	6	6	10	10	10	10
C	162	162	233	233	310,5	310,5	345,5	345,5
D	236	249,5	257	274	428	447,5	533,5	561,5
E	53	53	62	62	96,5	96,5	121	121
F	196	196	228	228	337	337	395	395
G	105	105	120	120	175	175	224	224
H	105,5	105,5	99	99	146,5	146,5	215	215
J					101	101	128,5	128,5
K	95,5	95,5	150	150	157	157	237,5	237,5
L	131,5	131,5	167	167	238	238	325,5	325,5
M	110	110	152	152	220	220	210	210
N	4	4	4	4	6	6	6	6
P	10	10	14	14	18	18	18	18
Q							280	280

Port (mm)	40	40	50	50	65	65	80	80
Weight (kg)	21 (24)	22 (25)	38	41	115	120	185	200



Mobile unit



Shroud

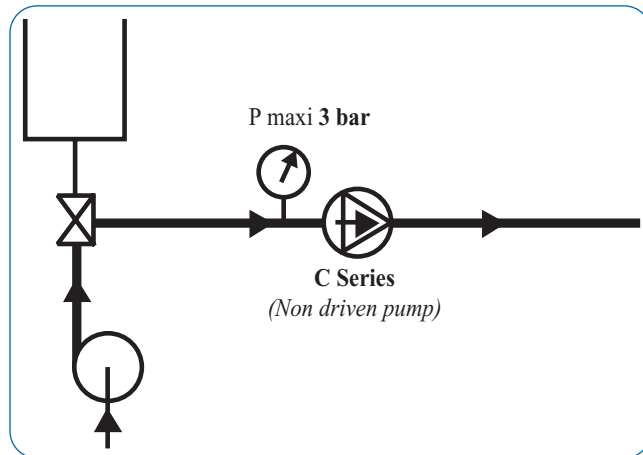
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◆ Stainless steel construction

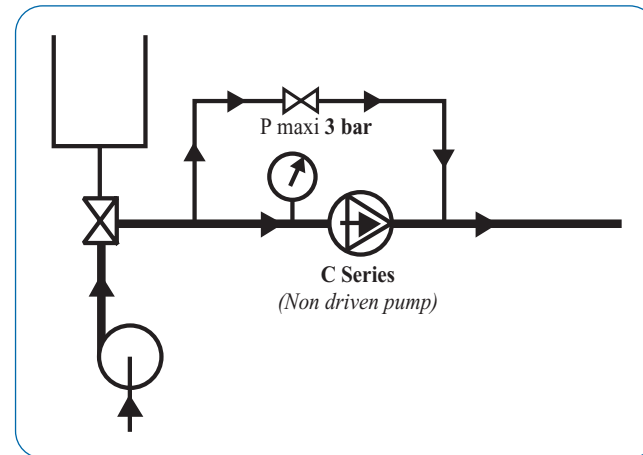
Cleaning recommendations

	C1/C2	C4/C8	C12/C18	C24/C36
CIP outputs required (m³/h) (maximum value)	10	10	30/35	40/45
Do we have to set up a bypass				
CIP outputs (m³/h)	15	YES	NO	NO
	20	YES	NO	NO
	25	YES	YES	NO
	30	YES	YES	NO
	35	YES	YES	NO
	40	YES	YES	NO

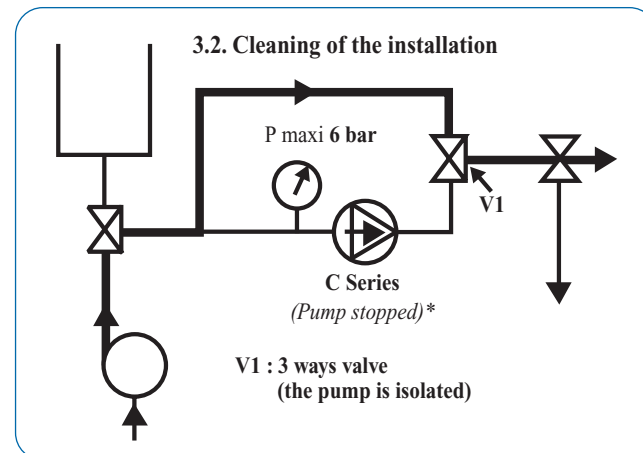
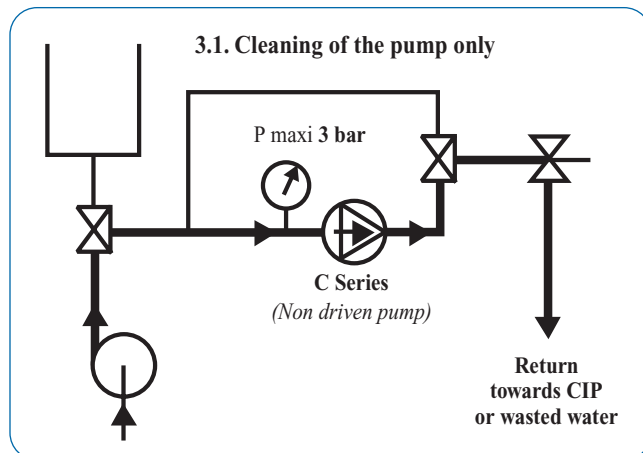
Setting without Bypass



Setting with Bypass



Cleaning in 2 steps (pump & installation)



Non driven pump = Pump no driven by the motor but could be driven by the CIP flush.
Pump stopped = Pump strictly stopped.

● Illustrations

Applications : varnish, painting, resin, glue, isocyanate, oil, solvent...



C12i in painting industry

Applications : isocyanate, polyol...



C18a in chemical industry

Applications : ointment, sirup, cream, suppository, shampoo...



C18i in cosmetic/pharmaceutical industry

Applications : flavour, sauce, chocolate, glucose...



C1i-VR in food industry

Applications : yeast, concentrate, glucose, flavour, alcohol...



C4i in beverage industry

Applications : yogurt, ferment, dessert, yolk...



C2i in dairy industry

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◆ Ductile Iron

(Pump equipped with heating base and relief valve)



C Series Pump	C4a	C8a	C12a	C18a	C4a-HT	C8a-HT
Displacement (liters)	0,108	0,178	0,411	0,617	0,108	0,178
Max. flowrate (m³/h)	5	8	12	18	5	8
Max. T° (°C)	100	100	100	100	150	150
Max. pressure (bar)	9	5	9	6	9	6
Max. speed (Rpm)	750	750	500	500	750	750
Particles passage* (mm³)	5	5	15	15	5	5
Opening size (suct/dis) (mm)	50	50	60	60	50	50

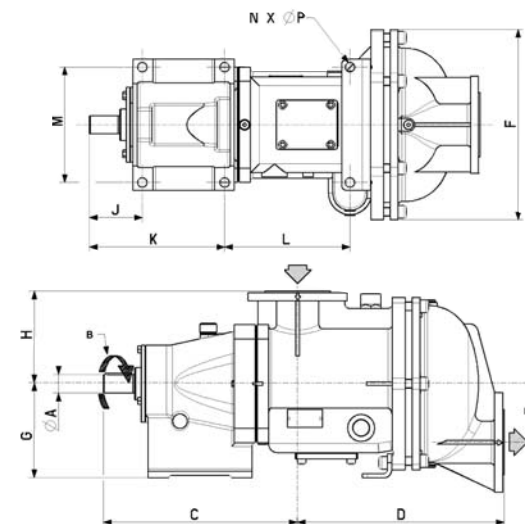
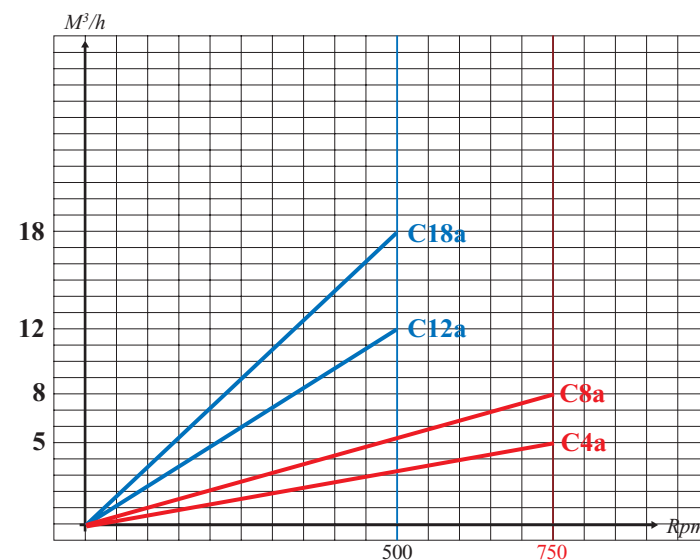
*Pump equipped with flanges (PN16/20)

C Series Pump	A	B	C	D	E	F	G	H	J	K	L	M	N	P
C4a	20	6	233	242	67	254	120	127		150	172	152	4	4
C8a	20	6	233	259	67	254	120	127		150	172	152	4	4
C12a	35	10	310,5	384	109	363	175	12	101	157	239	220	6	6
C18a	35	10	310,5	384	109	363	175	172	101	157	239	220	6	6

C Series Pump	C4a	C8a	C12a	C18a
Port (mm)	50	50	65	65
Weight (kg)	43	46	115	120

BELOWS : 316 Ti
 DISC : GS ductile iron
 CYLINDER : GS ductile iron
 BODYCASE : GS ductile iron

RINGS : Viton O'Ring Encapsulated teflon
 FLANGES : PN16, PN20



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