SPEC SHEET 1102-001 E
SECTION : **1001**
Effective : **December 2012**
Replaces : **December 2008**

S SERIE S Mouvex Technology

Eccentric disc pump



S2



S4C



S6C

Sealing

- Designed without mechanical seals, packing or magnetic drive, the S-Series pumps eliminate leakage.
- The transmission mechanism is protected by a tasteless, high-resistance elastomer sleeve meeting FDA requirements.

Cleaning

- The S-series pumps are designed for cleaning in place (CIP and SIP).
- The S-series pumps can also be cleaned by hand thanks to their quick and easy opening.

Overall dimensions

- Due to its small size and low weight, the S-series pumps are ideal for " baseframe " mountings.

ATEX certified.

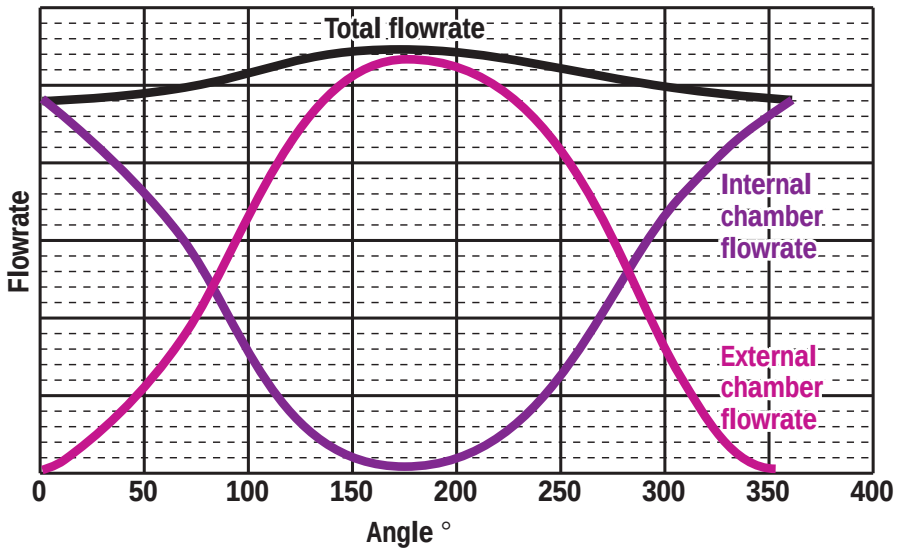
Ⓔx II 2G IIB T2, T3, T4, T5 (according to pumped product temperature)

Can run dry in ATEX environment.

Up to 12 m³ per hour
6 bars and 10 bars pressure

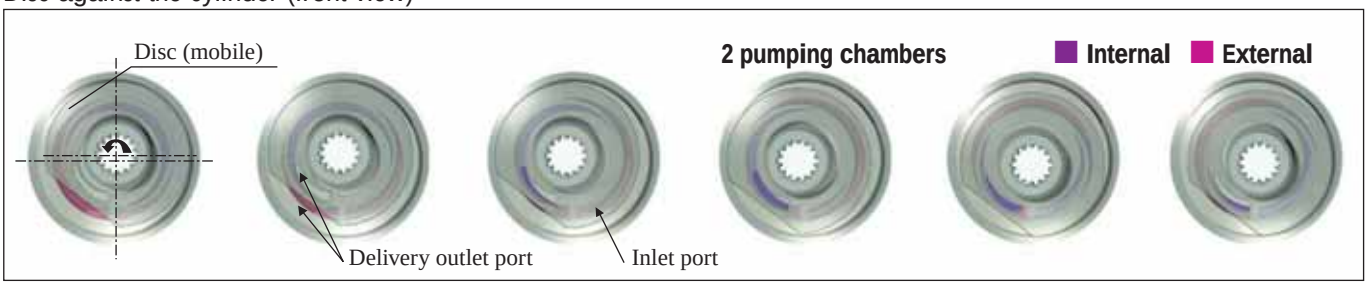
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◆ Low pulsation rate



● Mouvex Technology

Disc against the cylinder (front view)



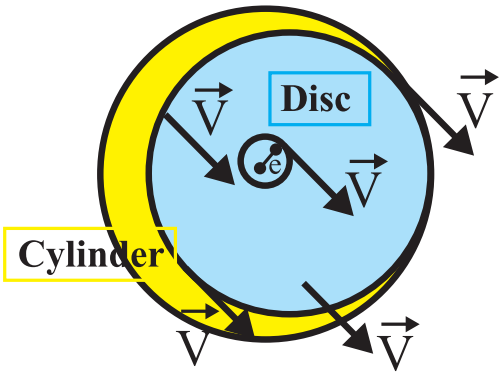
Disc against the cylinder (cross section)



● 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.



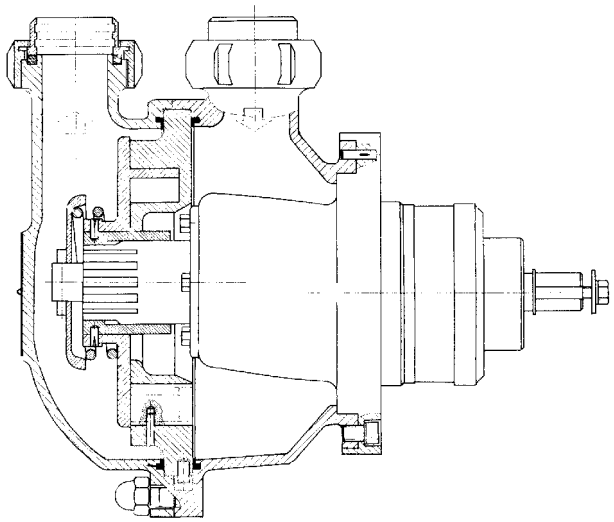
$V = \omega\ e$

e : excentration of the shaft *V : linear speed*

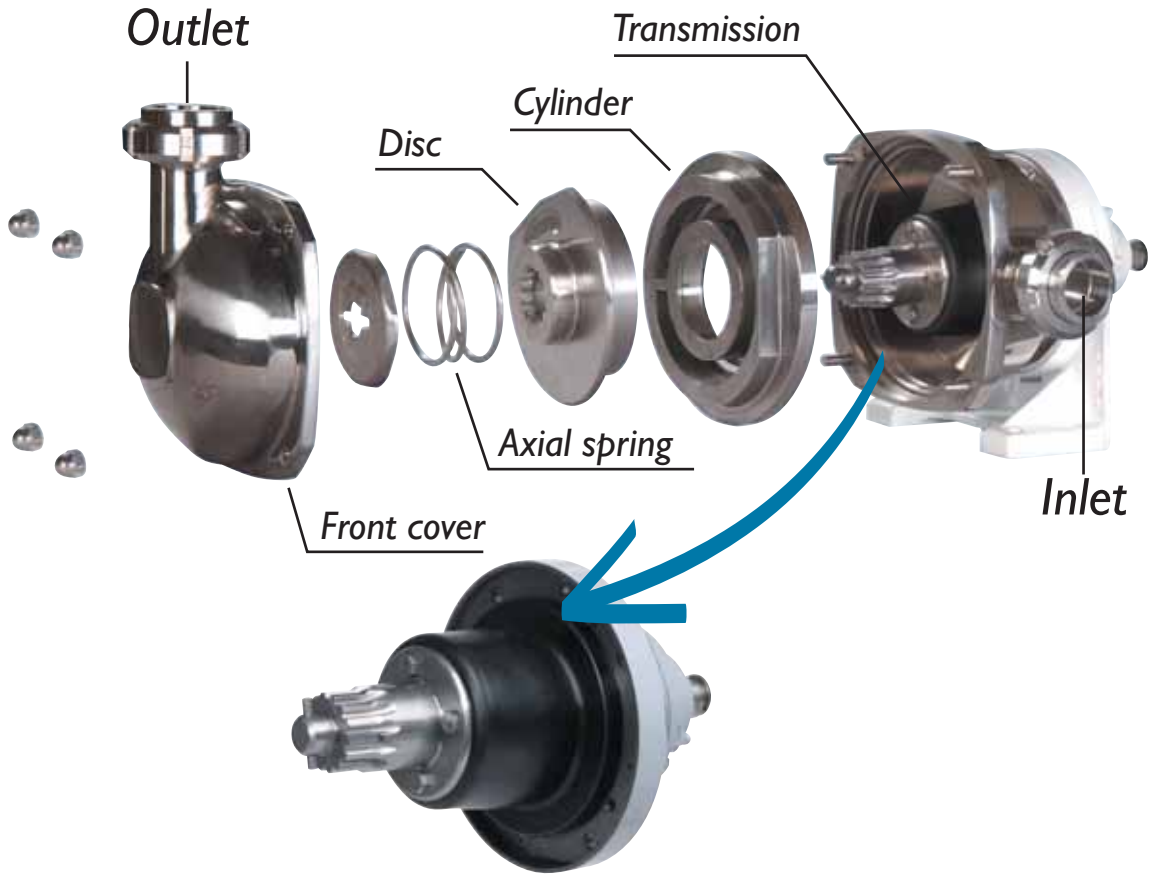
Main advantages

- Self-priming with strong suction power
- Ability of draining the pipes (Inlet and Outlet)
- Ability of dry running
- Low shearing
- Maintains delivery / pressure performances over time
- Outstanding volumetric efficiency
- Pumped product constantly renewed
- Ability to pump high and low viscosity products
- Output not affected by variation in viscosity
- Low linear speed

S-SERIES PUMP (cross section)



Pump without mechanical seal or packing (seal free design)



As per CE Directive (67 / 548 / EEC), the composition of the transmission elastomers does not contain DEPH and / or DBP.

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● Pharmaceuticals, cosmetics

Pumped product unaffected

Shear-sensitive products are safe when pumped with the S-Series pumps thanks to :

- permanent product renewal in the pump body
- the slow movement speed of the disc

Performances

- Very accurate volume metering enabling precise dosing and mixing for viscous or fluid products
- High-speed priming and self-priming
- Capability to run dry
- Capability to clear the pipes (inlet and outlet)



Ointment, syrup, shampoo, lotion, toothpaste, etc.











● Food industry

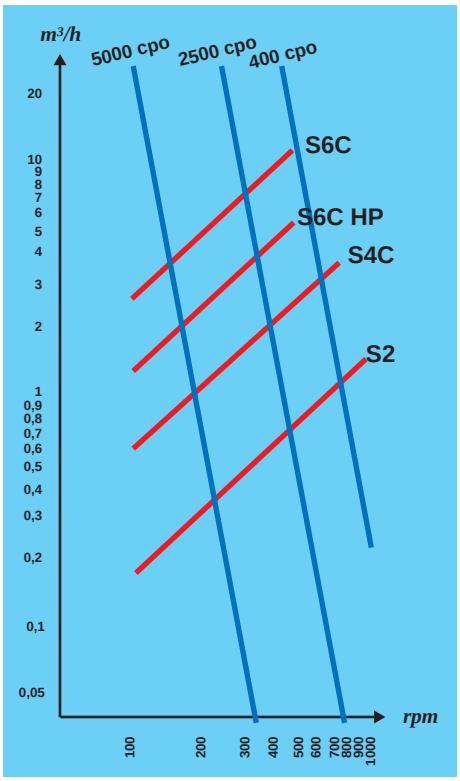


Sauce, yogurt, cream, yeast, flavouring, applesauce, liquid egg, liquid sugar, wine, etc.



Performances

S-Series pumps flowrates



Dynamic viscosity measured by rheomat

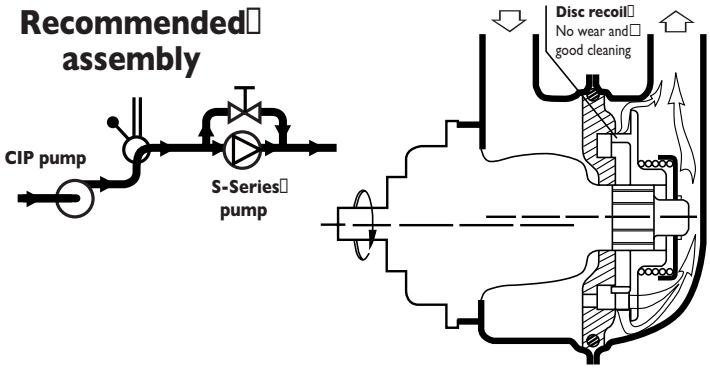




Cleaning in place

During the “cleaning in place” (CIP) phase, the S-Series pump must be running at low speed (variable speed pump) or be shut down (fixed speed pump) or possibly be running in dis-continuous cycles.

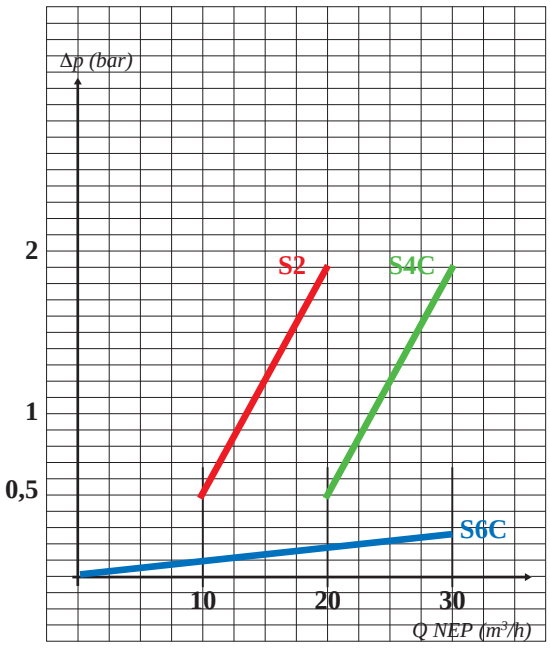
The centrifugal pump delivering the cleaning solution must be installed in-line (CIP pump delivery supplying the S pump intake)





S-Series pump using recommendation during CIP (“cleaning in place”)

		S2	S4C	S6C
CIP flowrate (m³/h) (delivred by centrifugal)		10	10	20/25
Use of external by-pass				
CIP flowrate (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



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Illustrations



S2 on hot suppository



S6C on whey



S2 on liquid sugar



S6C on liquid egg



S4C on toothpaste

Illustrations



S2 on ointment



S4C and S6C on cosmetic cream



S4C on flavoured milk



S4C on yogurt



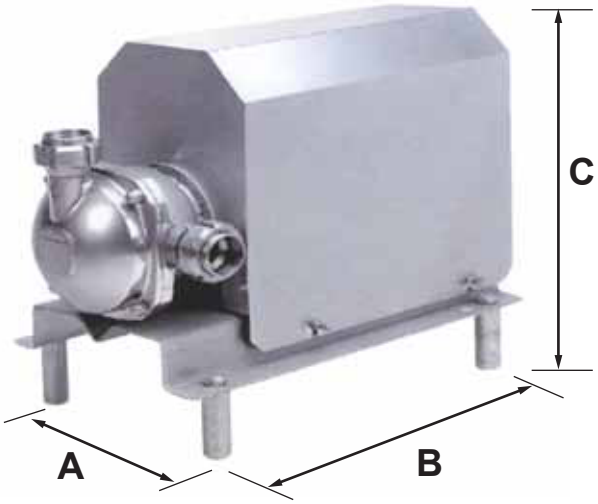
S4C on coffee liquor

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◆ Features :

S-Series Pumps	S2	S4C	S6C	S2 HP	S6C HP
Max. flowrate (liters/hour)	1500	4000	12000	1100	6000
Max speed (rpm)	900	750	500	900	500
Max. output pressure (bar)	6	6	6	10	10
Max. operating temperature*	80° C	80° C	80° C	80° C	80° C
Interior diameter of ports (mm)	22	35	60	22	60
3-part couplings for tube with external dia. (mm)	38	51	63	38	63
Max. dimensionA (mm)	340	340	460	340	460
Max. dimensionB (mm)	880	925	1240	880	1240
Max. dimensionC (mm)	505	525	670	505	670

*SIP 120° C (20 minutes) - Please contact us for any other specific characteristics.





Options

- Choice of couplings
- Mobile unit
- Shroud

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