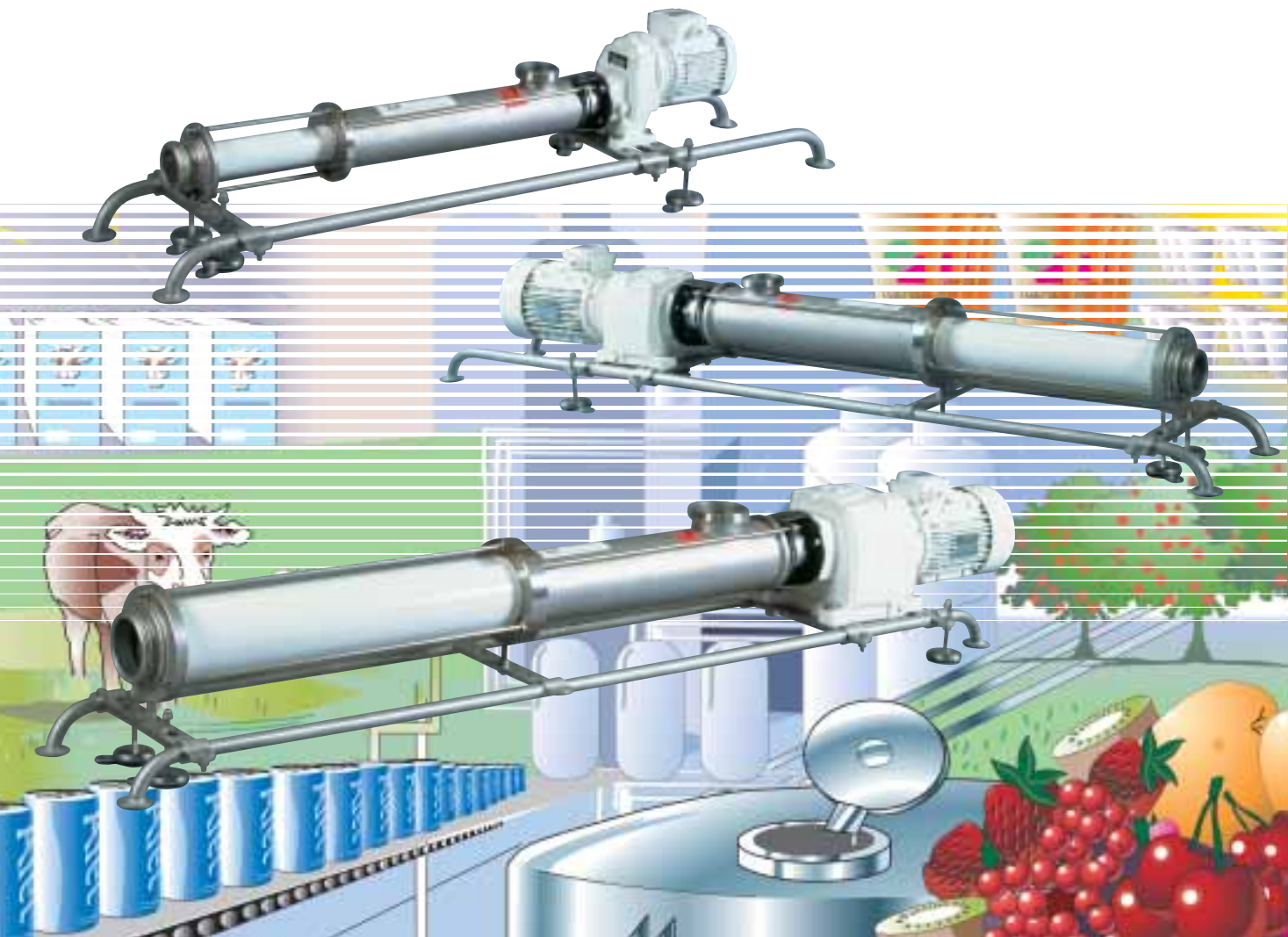


Impact Series

Moineau Pumps

simple and economical maintenance
for food and personal care applications



Impact Series : stainless steel progressive cavity pump



► Advantages

of the Moineau technology:

- Accepts fragile and viscous products
- High suction and self-priming capabilities
- Constant non-pulsating flow
- Ease of Maintenance
- Reversibility
- Flow rate proportional to running speed
- No valves
- Pump derived directly from the invention by René Moineau, founder of PCM Pompes

of the Impact Series Moineau pump:

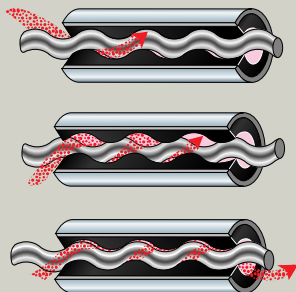
- Stainless steel design for applications in food and personal care sectors
- Simple and sturdy
- Easy maintenance thanks to simplified dismantling
- Easy cleaning out of place (COP) with rinsing and draining option
- Versatile (diverse range of products and applications)

Characteristics

- 7 models
- Maximum flow rate: 23.5 m³/h
- Maximum pressure (6 bars per pitch): 12 bars
- Maximum temperature in continuous service: 80°C
- Different elastomers available (stator and sheath): CSM for standard applications, NBR for greasy products

Operation

A Moineau pump consists of a helical rotor turning inside a helical stator. The stainless steel rotor is machined to a high degree of precision, and the stator is molded in a resilient elastomer. The geometry and the dimensions of these parts are such that when the rotor is inserted into the stator, a double chain of watertight cavities (honeycombed-shaped) is created. When the rotor turns inside the stator, the honeycomb progresses spirally along the axis of the pump without changing either shape or volume. This action transfers the product from the pump intake to the pump discharge without degrading the product.



The Impact Series: Designed for food and personal care applications:

Entire construction in stainless steel Life Cycle (LCC) costs reduced:

(= easy dismantling, spare parts life span, reduced waste product, energy consumption)

Body:

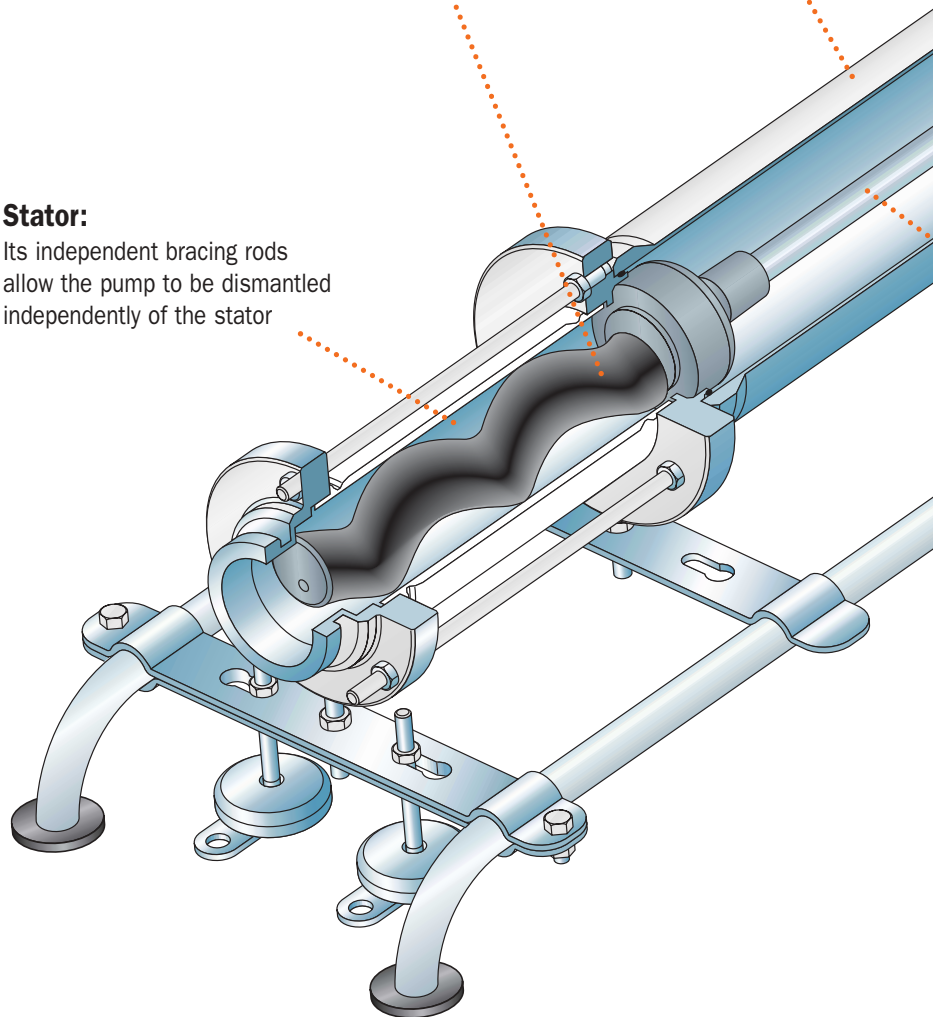
- In 316L stainless steel glass blasted inside and out
- SMS, DIN, CLAMP, MACON connections
- Easy to dismantle: body supported during dismantling
- Options: Rinsing or draining pipe (same types of connections)

Rotor:

- In 316L stainless steel

Stator:

- Its independent bracing rods allow the pump to be dismantled independently of the stator



Construction of Impact Series

Drive:

- by motor reducer with or without a frequency variator

Spacer:

- In 316L stainless steel
- The seal and spacer bracket is made out of a single piece

Shaft sealing:

- provided with a simple carbide/ carbide mechanical seal
- Optional: simple mechanical seal with quench

Drive shaft:

- In stainless steel
- Simplicity and robustness: classical joints
- Easy to dismantle and reassemble : drive shaft and motor shaft coupled by a pin
- Dismantling possible from the rear

Base:

- In stainless steel
- Simplicity, Accessibility
- Adjustable legs for adjusting the horizontality of the pump depending on the slope of the workshop floor /With possibility of being fixed to the floor
- Easy to dismantle: the pump does not topple over when being assembled
- No retention areas

Applicable directives and standards

CE

NF

Ex

Impact series pumps meet the machine directive and its harmonised standards. They also comply with the ATEX directive.

To ensure the optimum operation of its pumps, PCM proposes the following:

Accessories

Pressure sensors:

To better control your process : Manometer, pressure switch, pressure transmitter, combined pressure sensor.

Dry run protection device:

Detects product circulation to protect against stoppages or dry running that could damage the stator.

Optional equipment

By-pass and /or safety valve

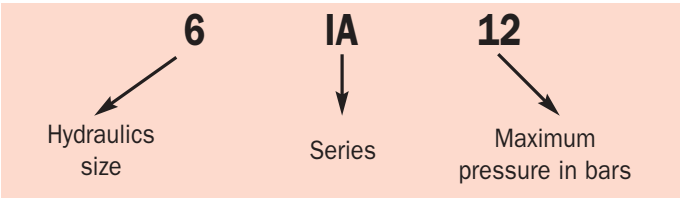
Avoids the risk of pump damage in the event of overpressure. Controls flow rate.

Automatic level, flow-rate and pressure controls

Control systems for pump and process implemented by PCM.

Contact us for more information.

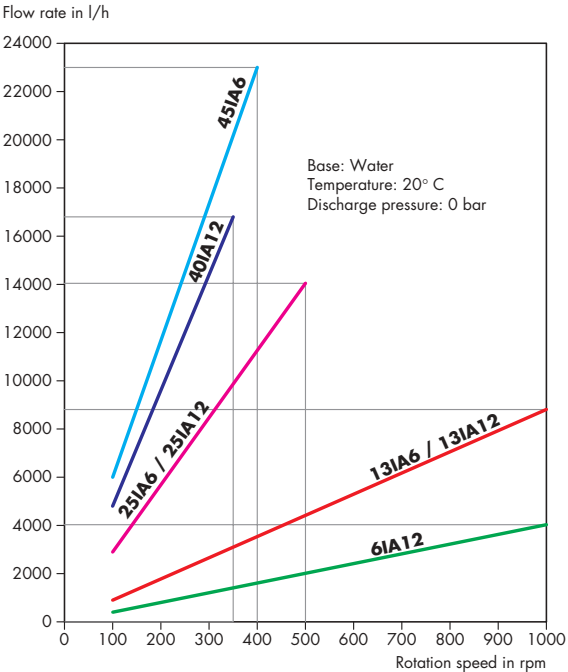
Understanding model designation



Performances

Pump	Flow rate in (l/h)	Maximum speed (rpm)	Maximum pressure (bars) *
6IA12	4 000	1 000	12
13IA6	8 800	1 000	6
13IA12	8 800	1 000	12
25IA6	14 000	500	6
25IA12	14 000	500	12
45IA6	23 500	400	6
40IA12	16 500	350	12

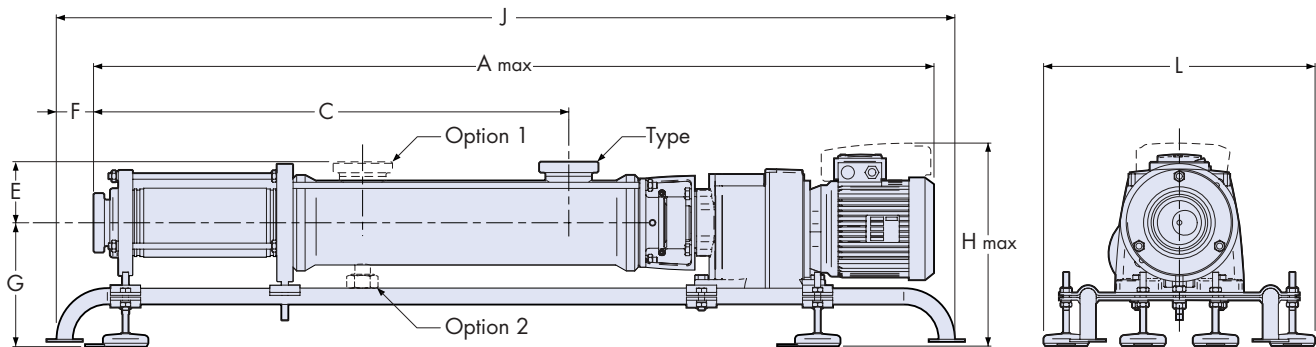
Routine performance with water at 20 °C and discharge pressure at 0 bar.
* Stainless steel construction up to 45 bars and 240 m3/h (I – ID Series).



Overall Dimensions & Connections

Pump	Connection		C	A max	E (± 3)	F	J L	G (± 10)	H max	Mass max (Kg)
	Type	DN								
Options : 1- Rinsing pipe: Same type and DN as connection. 2- Draining pipe: Same type as connection (DN25). Not available in MACON connection.										
13IA6	SMS	63,5	701	1386	82	69	1486	173	505	76
	DIN	65	707	1391	97					
	CLAMP	63,5	706	1390	86					
	MACON	60M	699	1384	80					
25IA6	SMS	76	786	1605	101	61	2016	204	458	108
	DIN	80	799	1618	120					
	CLAMP	76	785	1604	106					
	MACON	70	802	1621	99					
45IA6	SMS	104	938	1772	107	120	2016	208	462	147
	DIN	100	955	1789	130					
	CLAMP	104	932	1766	107					
	MACON	100	951	1785	101					

Pump	Connection		C	A max	E (± 5)	F	J L	G (± 10)	H max	Mass max (Kg)
	Type	DN								
6IA12	SMS	63,5	763	1353	82	69	1486	173	505	62
	DIN	65	769	1358	97					
	CLAMP	63,5	768	1357	86					
	MACON	60M	781	1351	80					
13IA12	SMS	63,5	910	1595	82	25	449	204	458	140
	DIN	65	916	1600	97					
	CLAMP	63,5	915	1599	86					
	MACON	60M	908	1593	80					
25IA12	SMS	76	1070	1889	101	61	2016	204	458	140
	DIN	80	1083	1902	120					
	CLAMP	76	1069	1888	106					
	MACON	70	1086	1905	99					
40IA12	SMS	104	1313	2194	107	56	449	228	472	180
	DIN	100	1330	2211	130					
	CLAMP	104	1307	2188	107					
	MACON	100	1326	2207	101					





13IA12 in animal feeding for transferring and injecting ingredients (oils, molasses, enzymes, etc.).



40IA12 in ready-made meals: transfer of tomato sauce as an ingredient for various sauces.

Applications



13IA6 in the sauce industry: transfer of ketchup or mayonnaise from the cooking phase to the storage tank.

Functions: Unloading, Transfer and Loading / Dosing / Feeding and filling



Food and personal care applications:

The PCM Moineau range proposes the following products for food and personal care industries.

Serie	Hygiene	Cleaning	Max flow rate	Max pressure
H	Ultra-clean applications	CIP	40 m3/h	24 bars
Impact	Food and personal care applications	COP*	23,5 m3/h	12 bars**
Compact	Food and personal care applications	COP	16 m3/h	4 bars
*cleaning possible by rinsing and draining - **stainless steel construction up to 45 bars and 240 m3/h (HD series)				

Field	Products transferred by PCM Moineau Impact Series pumps
Food industry	<ul style="list-style-type: none"> Meat, Fish, Pet Food: Oils and animal fats (Tallow, Lard, etc.), Blood, Gelatine, Ingredients (Oils, Molasses, Brine, Enzymes, Lactic / Ascorbic acids, Chlorides, etc.) Bread, Cakes, Pastry: Yeast, Ingredients and Additives Drinks: Water, Juice, Alcohols, Wine, Must, Lees, Yeast, Liquid Sugar, Flavours, Colouring, etc. Fruits, Vegetables, Salads: Tomato and fruit concentrates, fruit juices and sauces, Vegetable oils and fats, Gum Arabic, Sludge, etc. Other food industries: Sugar products (Liquid sugars, Pulps, Syrups, Molasses, Residuary liquors, etc.), Glucose, Malting plants, Starch, Flocculents, etc. Derivated: Concentrated milk, Cream, Curd, Melted cheese, By products
Personal care	<ul style="list-style-type: none"> Cosmetics: Cosmetic bases, Soaps, etc.

Services

PCM is constantly striving to work closer with its partners by responding to its customers’ needs and offering quality service. All the aspects of LCC are taken into account to provide a better quality product and improve performance.

Training & Maintenance:

PCM offers maintenance contracts drawn up to suit the requirements and operating conditions of each production unit as well as training courses designed to give maintenance personnel a thorough understanding of how to use and maintain positive displacement pumps.

Technical assistance:

Training and maintenance are reinforced by the PCM Hotline who in turn send out technical staff to perform preventive or corrective maintenance of installations.

Spare parts:

PCM holds a permanent stock of spare parts and accessories in order to respond to all urgent enquires.



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