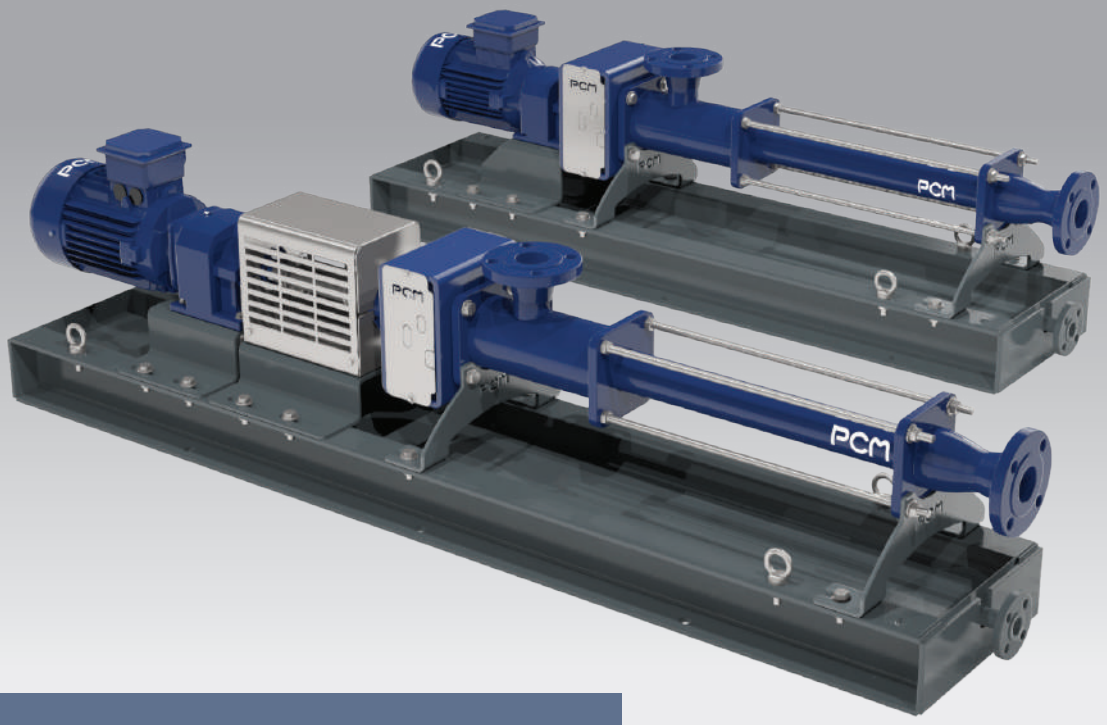
OIL & GAS



PCM A SERIES

PROGRESSING CAVITY PUMPS

www.pcm.eu

PCM | keep it moving

“PCM A SERIES: WHEN THE DEMAND OF AN ENGINEERED PUMP SOLUTION IS REQUIRED”

The PCM Moineau™ A series pump is a culmination of our unrivalled industry expertise and our unwavering commitment to provide the best fluid handling solutions.

PCM A Series is our high spec choice for engineered pumping solutions and demanding applications.

PCM A Series of Progressing Cavity Pumps offers a flexible option list to choose the most appropriate technologies for your application, including:

- Range of material selections encompassing carbon steel, stainless steel, Duplex steel (22%) and super Duplex Steel (25%) to accept any fluid conditions when cast iron is not acceptable
- Constant Thickness (CT) stators, where higher pressure ratings or shorter overall pump lengths are required

- PCM Slugger rotor technology, when highly gaseous fluids are handled
- Options to comply with **API 676 4th edition** for rotary positive displacement pumps

PCM A series relies on the experience of **more than 90 years of surface pumping in industry’s harshest environments** whether it is operating onshore or offshore. This will ensure the selection matches with the application.

PCM A Series modular design enables either **horizontal design** or **vertical design** to meet project specifications like footprint, long shaft vertical pumps (more than 40 m / 130 ft long) or any other design that needs to fit in tight spaces (can, sump, trailer, narrow platform...).

OPERATING PRINCIPLE

A Moineau™ pump consists of a helical rotor turning inside a helical stator. The metallic rotor is machined to a high degree of precision, and the stator is moulded 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 is created. When the rotor turns inside the stator, the cavity progresses spirally along the axis of the pump without changing either shape or volume.

PCM MOINEAU™ TECHNOLOGY

The PCM A Series progressing cavity pump technology brings multiple benefits:

- Transfers low-viscosity or viscous fluids
- Handles fluids with suspended solids such as sand
- Lowest NPSH of all positive displacement pumps
- Gently conveys fluids, with low shearing effect
- Handles fluids with free gas

The PCM A Series has also the following features:

- Easy to maintain
- Reversible flow circulation
- Flow rate proportional to running speed

PCM ELASTOMERS EXPERTISE

Elastomers are very unique materials that play a critical role in the operational efficiency of progressing cavity pumps. To ensure that our pumps always feature the highest quality and use the most compatible elastomers, we manufacture our own. Over 80 years of experience developing, mixing and producing our own elastomers has given us unparalleled expertise in this domain. We have an extensive database of elastomer formulas and fluid compatibilities.

TYPE	PCM ELASTOMER	APPLICATION	MECHANICAL PROPERTIES			CHEMICAL RESISTANCE (1 = low, 10 = high)				DYNAMIC		STATIC	
			Hardness (Shore A)	Mechanical Strength (1 = low, 10 = high)	Abrasion Resistance (sand) (1 = low, 10 = high)	BTEX	HzS	CO^2	WATER	MIN TEMP	MAX TEMP	MIN TEMP	MAX TEMP
NBR	164	- Versatile - Good mechanical resistance - Limited aromatics resistance	63	7	6	2	4	5	6	0°C	120°C	-5°C	125°C
HNBR	198	- High temperature - Good H2S resistance - Good abrasion resistance	78	8	8	4	8	10	7	0°C	150°C	-5°C	150°C
FKM	186	- Good chemical resistance - Good aromatics resistance - Limited abrasion resistance	72	4	2	10	8	8	10	-5°C	120°C	-15°C	200°C

This table is indicative and highlights the main elastomer properties and capabilities. PCM provides elastomer compatibility testing under controlled lab conditions to ensure the right elastomer for your application; contact our After-sales Service team for more information.

PCM'S PROGRESSING CAVITY PUMP TECHNOLOGY ENHANCEMENTS...

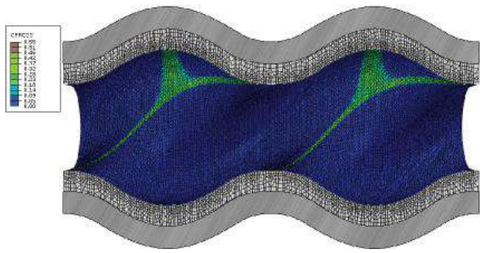
PCM continuously drives innovation into our product lines, to provide a complete range of solutions to our customers.

PCM CT

Constant Thickness (CT) stator technology

PCM CT stator technology gives you more pressure per stage compared to conventional stators in a progressing cavity pump.

More pressure per stage means you need less stages for your application, and this translates to a smaller pump; so you get the benefits of progressing cavity pump technology in more space constrained installations.



Compared to conventional stators, PCM CT also gives you better, more reliable performance when your pump is operating across a wider range of fluid temperatures.

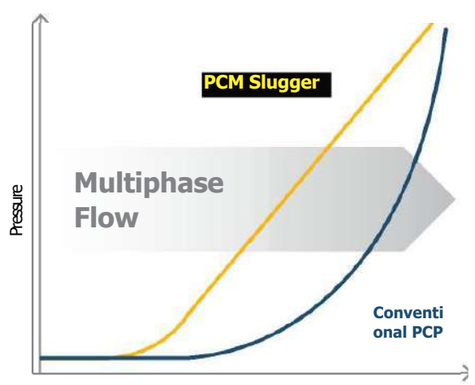
Pump models including the CT suffix incorporate PCM CT (Constant Thickness) stator technology.

PCM SLUGGER

Hydraulically Regulated (HR) progressing cavity pump

When using a conventional progressing cavity pump for multiphase flow, pressure build-up occurs on the discharge side of the pump shortening run life.

With PCM Slugger, pressure is balanced across the pump. Liquid and gas pressure is more uniformly distributed along the stator. This reduces internal stress and contributes to better reliability and longer run life.



BEYOND THE PRODUCT, A UNIQUE TECHNICAL SUPPORT

We provide a range of services designed to support our clients throughout every phase of their projects and operations; from front end engineering and design, through project related services, product verification, on-site and workshop services and spare parts.

PROJECT

PCM's dedicated project management organisation provides first class project related services to support capital projects throughout the front end and project execution phases.

WORKSHOP

Our workshops are equipped with the latest tools for failure analysis, repair and upgrading of equipment. Practical training in our training centres ensures that your operations and maintenance teams are ready to get the best out of our equipment and to minimise your operational costs.

ON SITE

Our professional and qualified site teams are available for mobilisation anywhere in the world – onshore and offshore - to provide a wide range of on-site services, including: installation & commissioning of new equipment, maintenance, audits, optimisation and upgrades & training.

SPARE PARTS

Thanks to our worldwide network of sales agencies and distributors, you can obtain genuine PCM spare parts quickly. Using PCM spare parts ensures that PCM products last as long as possible, benefit from warranty protection and maintain their CE conformity until their end of life.

PCM experts are dedicated to spare parts and answer your request in the shortest time. Thus, available standard PCM spare parts can be delivered within 24hrs (depending on the location).

TESTING

Our purpose built in-house testing facilities enable us to test pumps in the vertical position and at rated speeds, ensuring simulation of the actual operating conditions and in-line with API standards.

Our in-house testing includes: pump performance, NPSH, and vibration levels. Our specialist in-house laboratories are equipped to provide elastomer testing and characterisation, including compatibility with your specific fluids

PCM A SERIES SPECIFICATIONS

Progressive Cavity Pump is the first choice when facing any of the challenges of high viscosity, solid handling, very low NPSH or low shear applications.

MODEL	Max Flowrate (0 bar/psi DP)		Max Flowrate (Max DP)		Max Diff. Pressure (DP)		Max pump speed	Pump approx dimensions L x W x H		Main Process connections		PCM Slugger (HR) option available
	m³/h	gpm	m³/h	gpm	bar	psi	rpm	m	ft	Suction	Discharge	
003A24	0.015	0.066	0.01	0.044	24	348	600	1.4 x 0.35 x 0.47	4.59 x 1.15 x 1.54	1" 150#RF	1" 300#RF	
05A12	0,175	0,771	0,1	0,44	12	174	600	1.4 x 0.35 x 0.47	4.59 x 1.15 x 1.54	1" 150#RF	1" 150#RF	
1A12	0,45	1,98	0,3	1,32	12	174	600	1.45 x 0.35 x 0.47	4.76 x 1.15 x 1.54	1" 150#RF	1" 150#RF	
1A36	0,7	3,08	0,5	2,2	36	522	600	2.05 x 0.35 x 0.47	6.73 x 1.15 x 1.54	2" 150#RF	2" 300#RF	
3A12	1	4,4	0,65	2,86	12	174	600	1.75 x 0.35 x 0.47	5.74 x 1.15 x 1.54	2" 150#RF	2" 150#RF	
6A6	2,4	10,6	1,5	6,6	6	87	600	1.68 x 0.35 x 0.47	5.51 x 1.15 x 1.54	2" 150#RF	2" 150#RF	
6A12	2,4	10,6	1,5	6,6	12	174	600	1.82 x 0.35 x 0.47	5.97 x 1.15 x 1.54	2" 150#RF	2" 150#RF	
6A24	2,4	10,6	1,5	6,6	24	348	600	2.07 x 0.35 x 0.47	6.79 x 1.15 x 1.54	2" 150#RF	2" 300#RF	
8A72	2	8,81	1,4	6,16	72	1044	360	5 x 0.65 x 1.05	16.4 x 2.13 x 3.44	2" 150#RF	2" 600#RF	
13A6	5,3	23,3	3,2	14,1	6	87	600	1.75 x 0.35 x 0.47	5.74 x 1.15 x 1.54	2" 150#RF	2" 150#RF	
13A12	5,3	23,3	3,2	14,1	12	174	600	1.96 x 0.35 x 0.47	6.43 x 1.15 x 1.54	2" 150#RF	2" 150#RF	
13A24	4,7	20,7	3,2	14,1	24	348	530	2.5 x 0.35 x 0.6	8.2 x 1.15 x 1.97	2" 150#RF	2" 300#RF	
14A72	3,7	16,3	2,6	11,4	72	1044	360	5.3 x 0.65 x 1.05	17.39 x 2.13 x 3.44	4" 150#RF	4" 600#RF	
20A72	6,9	30,4	5,2	22,9	72	1044	360	6.2 x 0.65 x 1.05	20.34 x 2.13 x 3.44	4" 150#RF	4" 600#RF	X
25A6	15	66	12	52,8	6	87	530	2 x 0.35 x 0.6	6.56 x 1.15 x 1.97	4" 150#RF	4" 150#RF	
25A12	15	66	12	52,8	12	174	530	2.3 x 0.35 x 0.6	7.55 x 1.15 x 1.97	4" 150#RF	4" 150#RF	
25A24	15	66	12	52,8	24	348	530	3.25 x 0.47 x 0.76	10.66 x 1.54 x 2.49	4" 150#RF	4" 300#RF	X
25A48	10	44	7,6	33,5	48	696	360	4.45 x 0.55 x 0.83	14.6 x 1.8 x 2.72	4" 150#FR	4" 300#RF	X
28A72	11	48,4	8,5	37,4	72	1044	310	7.3 x 1 x 1.1	23.95 x 3.28 x 3.61	4" 150#RF	4" 600#RF	X
28A132	11	48,4	8,5	37,4	132	1914	310	10.2 x 1 x 1.1	33.46 x 3.28 x 3.61	4" 150#RF	4" 900#RF	X
40A6	27	119	22,5	99,1	6	87	530	2.5 x 0.47 x 0.76	8.2 x 1.54 x 2.49	4" 150#RF	4" 150#RF	
40A12	27	119	22,5	99,1	12	174	530	2.9 x 0.47 x 0.76	9.51 x 1.54 x 2.49	4" 150#RF	4" 150#RF	
40A12CT	27	119	22,5	99,1	12	174	530	2.5 x 0.47 x 0.76	8.2 x 1.54 x 2.49	4" 150#RF	4" 150#RF	
40A24	17,5	77,1	13	57,2	24	348	360	3.65 x 0.55 x 0.83	11.98 x 1.8 x 2.72	4" 150#RF	4" 300#RF	
40A24CT	17,5	77,1	13	57,2	24	348	360	2.9 x 0.55 x 0.83	9.51 x 1.8 x 2.72	4" 150#RF	4" 300#RF	
40A48	17,5	77,1	13	57,2	48	696	360	4.9 x 0.55 x 0.83	16.08 x 1.8 x 2.72	4" 150#RF	4" 300#RF	X
40A48CT	17,5	77,1	13	57,2	48	696	360	4 x 0.55 x 0.83	13.12 x 1.8 x 2.72	4" 150#RF	4" 300#RF	
40A96	15	66	12	52,8	100	1450	310	10.1 x 1 x 1.1	33.14 x 3.28 x 3.61	4" 150#RF	4" 600#RF	X
46A48	24	106	18	79,3	48	696	310	7.4 x 1 x 1.1	24.28 x 3.28 x 3.61	4" 150#RF	4" 300#RF	X
46A96	24	106	18	79,3	96	1392	310	10.3 x 1 x 1.1	33.79 x 3.28 x 3.61	4" 150#RF	4" 600#RF	X
48A72	27	119	20	88,1	72	1044	310	13 x 1 x 1.1	42.65 x 3.28 x 3.61	4" 150#RF	4" 600#RF	X
50A18	50	220	43	189	18	261	360	3.85 x 0.55 x 0.83	12.63 x 1.8 x 2.72	6" 150#RF	6" 150#RF	X
60A6	61	269	51	225	6	87	530	2.75 x 0.47 x 0.76	9.02 x 1.54 x 2.49	6" 150#RF	6" 150#RF	
60A12	43	189	32	141	12	174	360	3.3 x 0.55 x 0.83	10.83 x 1.8 x 2.72	6" 150#RF	6" 150#RF	
60A12CT	43	189	32	141	12	174	360	2.8 x 0.55 x 0.83	9.19 x 1.8 x 2.72	6" 150#RF	6" 150#RF	
60A24	43	189	32	141	24	348	360	4.15 x 0.55 x 0.83	13.62 x 1.8 x 2.72	6" 150#RF	6" 300#RF	X
60A24CT	43	189	32	141	24	348	360	3.25 x 0.55 x 0.83	10.66 x 1.8 x 2.72	6" 150#RF	6" 300#RF	
60A36	37	163	24	106	36	522	310	7.2 x 1 x 1.1	23.62 x 3.28 x 3.61	4" 150#RF	4" 300#RF	X
60A48	37	163	24	106	48	696	310	8.1 x 1 x 1.1	26.57 x 3.28 x 3.61	6" 150#RF	6" 300#RF	X
60A48CT	37	163	24	106	48	696	310	6.3 x 1 x 1.1	20.67 x 3.28 x 3.61	6" 150#RF	6" 300#RF	X
70A60	36	159	29	128	60	870	310	10.3 x 1 x 1.1	33.79 x 3.28 x 3.61	4" 150#RF	4" 600#RF	X
120A6	98	431	80	352	6	87	360	3.1 x 0.55 x 0.83	10.17 x 1.8 x 2.72	8" 150#RF	8" 150#RF	
120A12	98	431	80	352	12	174	360	3.75 x 0.55 x 0.83	12.3 x 1.8 x 2.72	8" 150#RF	8" 150#RF	
120A24	84	370	72	317	24	348	310	7.25 x 1 x 1.1	23.79 x 3.28 x 3.61	8" 150#RF	8" 300#RF	X
120A36	84	370	72	317	36	522	310	8.5 x 1 x 1.1	27.89 x 3.28 x 3.61	8" 150#RF	8" 300#RF	X
150A12	133	586	116	511	12	174	360	4.5 x 0.55 x 0.85	14.76 x 1.8 x 2.79	8" 150#RF	8" 300#RF	
150A24	115	506	100	440	24	348	310	8.3 x 1 x 1.1	27.23 x 3.28 x 3.61	8" 150#RF	8" 300#RF	X
150A24CT	115	506	100	440	24	348	310	6.6 x 1 x 1.1	21.65 x 3.28 x 3.61	8" 150#RF	8" 300#RF	
150A36	115	506	100	440	36	522	310	10.1 x 1 x 1.1	33.14 x 3.28 x 3.61	8" 150#RF	8" 300#RF	X
240A6	283	1246	235	1035	6	87	360	3.85 x 0.55 x 0.85	12.63 x 1.8 x 2.79	8" 150#RF	8" 150#RF	
240A12	242	1065	195	859	12	174	310	7.25 x 1 x 1.1	23.79 x 3.28 x 3.61	8" 150#RF	8" 150#RF	
240A12CT	244	1074	160	704	12	174	310	6.5 x 1 x 1.1	21.33 x 3.28 x 3.61	8" 150#RF	8" 150#RF	
240A18	180	793	133	586	18	261	230	8.45 x 1 x 1.1	27.72 x 3.28 x 3.61	8" 150#RF	8" 150#RF	
240A24CT	180	793	100	440	24	348	230	7.7 x 1 x 1.1	25.26 x 3.28 x 3.61	8" 150#RF	8" 300#RF	
240A36CT	180	793	100	440	36	522	230	9 x 1 x 1.1	29.53 x 3.28 x 3.61	8" 150#RF	8" 300#RF	
500A6	446	1964	312	1374	6	87	230	6.8 x 1 x 1.1	22.31 x 3.28 x 3.61	10" 150#FRF	10" 150#FRF	
500A12CT	446	1964	271	1193	12	174	230	7 x 1 x 1.1	22.97 x 3.28 x 3.61	10" 150#FRF	10" 150#FRF	

Notes :

Max flowrate is at Max pump speed and is based on water (1cP viscosity)

Dimensions :

- Dimensions are indicative and including drive. Expect some variation depending on the size and type of drive for your application.
- Height includes API baseplate. Dimension from underside of the baseplate to the top of the motor terminal box
- Main process connections: ANSI/ASME B16.5 standard

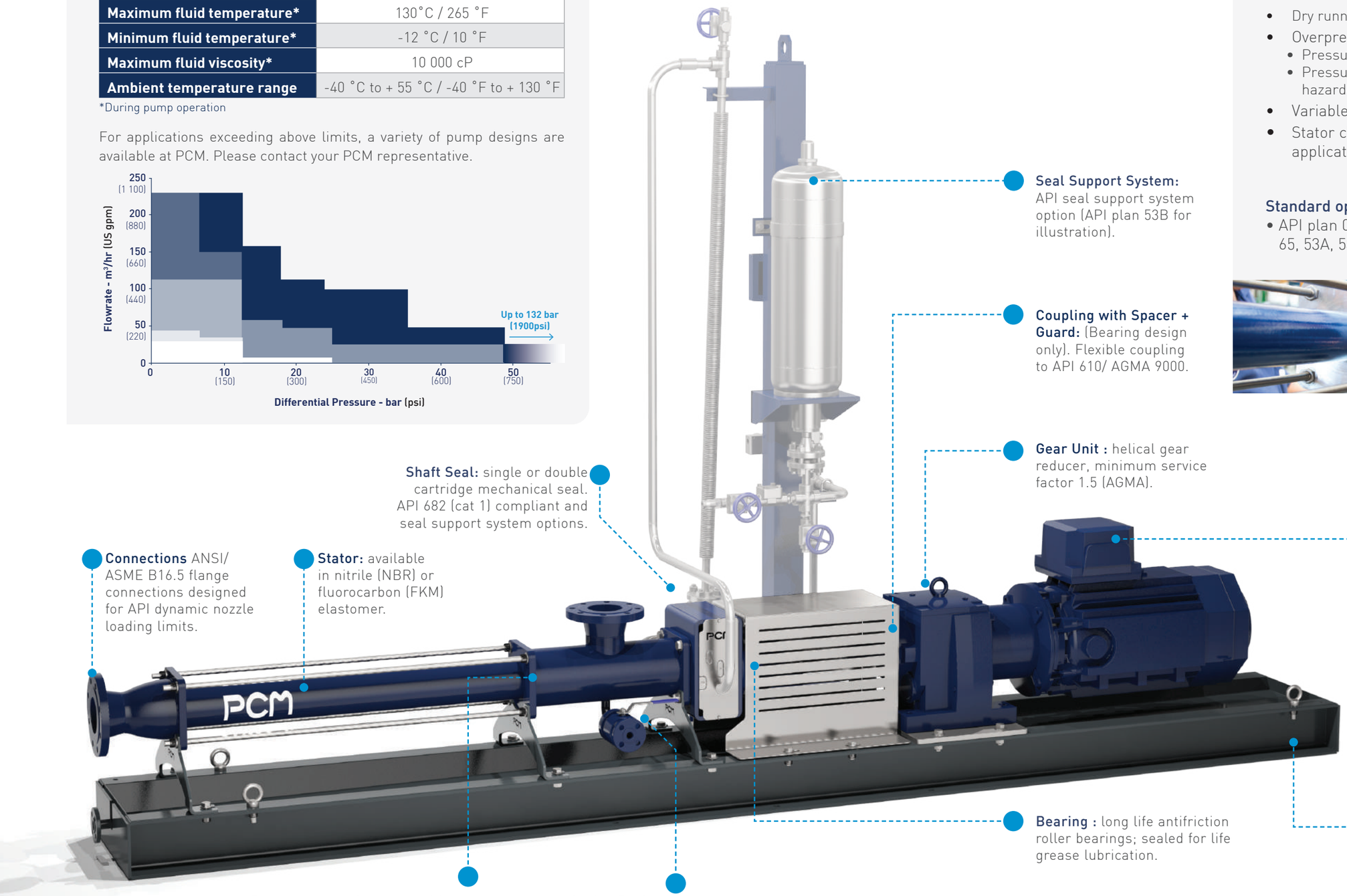
PCM MOINEAU™ A PERFORMANCE

PCM's API 676 pump features a modular design that makes installation, operation and service easier in many applications.

Maximum fluid temperature*	130°C / 265 °F
Minimum fluid temperature*	-12 °C / 10 °F
Maximum fluid viscosity*	10 000 cP
Ambient temperature range	-40 °C to + 55 °C / -40 °F to + 130 °F

*During pump operation

For applications exceeding above limits, a variety of pump designs are available at PCM. Please contact your PCM representative.



Seal Support System: API seal support system option (API plan 53B for illustration).

Coupling with Spacer + Guard: (Bearing design only). Flexible coupling to API 610/ AGMA 9000.

Gear Unit : helical gear reducer, minimum service factor 1.5 (AGMA).

Electric motor : IEC or NEMA design. Options for hazardous areas.

Shaft Seal: single or double cartridge mechanical seal. API 682 (cat 1) compliant and seal support system options.

Connections ANSI/ ASME B16.5 flange connections designed for API dynamic nozzle loading limits.

Stator: available in nitrile (NBR) or fluorocarbon (FKM) elastomer.

Pressure wetted parts : welded construction with materials options to suit a wide range of applications.

Casing Drain : with optional valve to facilitate safe maintenance.

Bearing : long life antifriction roller bearings; sealed for life grease lubrication.

Baseplate : welded steel construction with sloping driptray and drain connection, earthing and lifting attachments.

ACCESSORIES

A range of accessories are available to ensure safe and reliable operations:

- Dry running protection
- Overpressure protection & monitoring:
  - Pressure relief valves to API 520/526/527
  - Pressure transmitters with options for hazardous areas
- Variable speed drives
- Stator cladding for low ambient temperature applications.

Standard options for API seal plans:

- API plan 02/61 (standard for horizontal pumps), 65, 53A, 53B

CONSTRUCTION

The **PCM Moineau™ A** pump incorporates a high strength articulated drive shaft to accommodate the eccentric motion of the rotor, and features a patented connecting system for **quick and easy removal of the rotor and stator** during maintenance.

Small distance required for pump maintenance.

- The shaft design allows for a smaller diameter mechanical seal without compromising performance, leading to reductions in capital and operating costs for end users. **Up to 30% savings on replacement seals.**

- The double universal joint ensures compact articulation and with fewer parts, and no wearing pins. High durability NBR or FKM elastomer sheaths protect the joints from aggressive fluids.

Pump joint < 90 A models

Pump joint > 90 A models

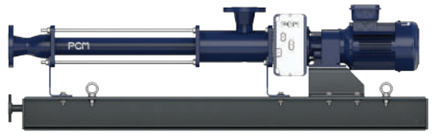
Patented 3 pin connecting systems

CONFIGURATIONS

The **PCM Moineau™ A** pump is available in two configurations.

MONOBLOC

- Simplest and most compact design



BEARING (LONG COUPLED)

- Remove the mechanical seal for maintenance without moving the drive or process piping

FEATURES

PCM A series pumps are available with the following options:

- Multi-coat epoxy paint system for harsh and corrosive environments (ISO12944, C3 or C5M environments).
- Cartridge mechanical seals for high performance, reliability and reduced maintenance costs.
- Bi-directional operation; discharge or suction at seal side options.
- Optional API682 cartridge mechanical seals.
- Optional API671 corrosion resistant metallic flexible coupling and spacer.
- Light, Medium and Heavy duty drive shaft designs to cover a wide range of torque and operating pressures.
- Pump length customised to suit the installation – up to 10m as standard (bespoke solutions for greater lengths) for vertical pumps.

QUALITY RECORDS

- Material certification to EN10204 3.1 for pressure wetted metallic parts.
- Optional materials and certification to NACE MR0175/ MR0103 for H2S containing applications.
- API inspection & testing options; performance, hydrostatic, NPSH, noise and vibration.
- API documentation options.

MATERIAL OPTIONS

A range of materials to suit a wide variety of applications:

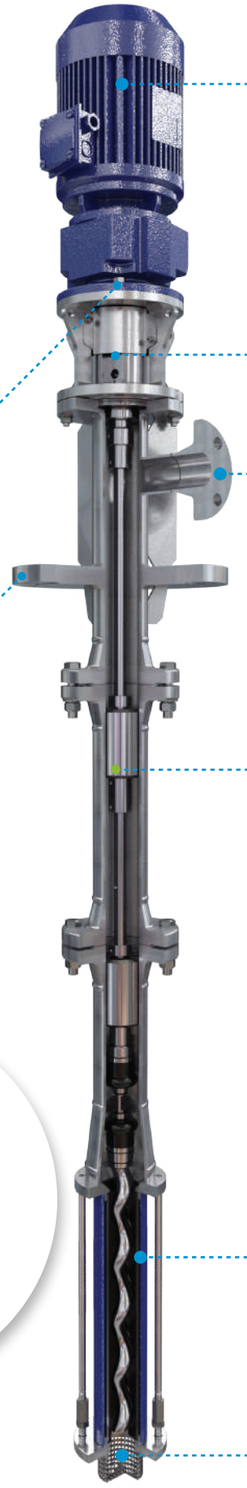
- Pump casings in carbon steel, AISI 316 stainless steel, 22Cr duplex and 25Cr super duplex stainless steels.
- Process wetted rotating parts in Halar® (ECTFE) coated AISI 4340 nitrided steel, AISI 316 stainless steel and 22Cr duplex stainless steel.
- Process wetted seals in AISI 316 stainless steel, 22Cr duplex and 25Cr super duplex stainless steels.
- Hard wearing chromium plated rotors for low friction and abrasion resistance.
- Fluorocarbon (FKM) or Nitrile (NBR) elastomer stators, formulated by PCM elastomer experts and manufactured in house.

AV MODEL PERFORMANCE

Maximum fluid temperature*	130°C / 265 °F
Minimum fluid temperature*	-12 °C / 10 °F
Maximum fluid viscosity*	10 000 cP
Ambient temperature range	-40 °C to + 55 °C / -40 °F to + 130 °F

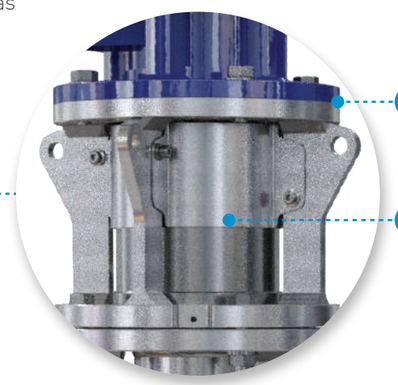
This applies to the standard product. PCM specialises in providing bespoke engineered solutions for applications outside of the above limits. Please contact your PCM representative for more information.

* during pump operation



MOTOR

IEC or NEMA electric drive options for hazardous areas



LIFTING POINTS

Integrated lifting eyes

DYNAMIC SEAL

Cartridge mechanical seals for easy maintenance

DISCHARGE

ASME B16.5 flange
API allowable nozzle loads

GEAR UNIT

Reduces motor output speed
Integrated bearings
Pre-aligned drive

SHAFT CENTRALISERS

Non rotating, maintenance free & corrosion resistant

CASING

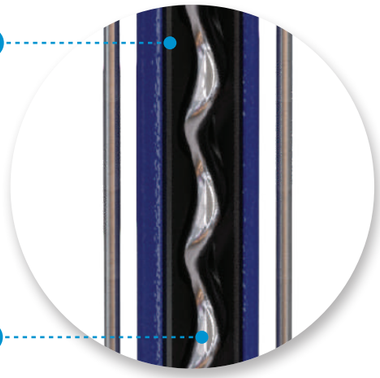
Multiple material options for a wide range of applications.

MOUNTING FLANGE

ASME B16.5 flange or mounting plate for fixing to tank or vessel

ELASTOMER STATOR

PCM unique in-house elastomer expertise. NBR (nitrile) and FKM (fluorocarbon) elastomers for a wide range of applications



ROTOR

Hard wearing chromium plated for low friction and abrasion resistance.

STATOR HOUSING

Optional corrosion resistant housing

INLET SUCTION STRAINER

Prevents large foreign objects from entering the pump.

PCM A SERIES VERTICAL DESIGN BENEFITS

- No valves to block or clog
- Concentric shaft rotation eliminates excess vibration
- No shaft line bearings or wearing parts ensure a high tolerance to sludge and slurry
- The lowest NPSH requirement – ideal for hydrocarbon condensate transfer

PROGRESSING CAVITY PUMPS

PCM Moineau™

PCM ECOMOINEAU™ C WITH FIXED STATOR

Low LCC

Performance:

- **Pressure:** 24 bars [348 PSI]
- **Flowrate:** from 3 l/h to 240 m³/h [0.01 to 1057 USGPM] (I Series: 500 m³/h / 2200 USGPM)
- **Particles size:** 40 mm [1.57 inch]
- **Range:** 37 models

Benefits:

- Ideal for abrasive and corrosive products
- The shortest stainless steel pump on the market
- Easy maintenance thanks to its articulation and its patented connecting system

PCM ECOMOINEAU™ CF WITH FLOATING STATOR

Space and time saving

Performance:

- **Pressure:** 4 bars [58 PSI]
- **Flowrate:** from 10 l/h to 16 m³/h [0.04 to 10.4 USGPM]
- **Particles size:** 6 mm [0.2 inch]
- **Range:** 7 models

Benefits:

- Compact, easy integration
- Low life cycle costs
- Quick and simplified maintenance

PCM ECOMOINEAU™ MX

Low LCC

Performance:

- **Pressure:** 24 bars [348 PSI]
- **Flowrate:** from 0.3 m³/h to 240 m³/h [1.32 to 1057 USPGM] (I Series: 500 m³/h / 2200 USGPM)
- **Particles size:** 40 mm [1.57 inch]
- **Range:** 36 models

Benefits:

- The shortest cast iron pump on the market
- Easy maintenance in place thanks to its articulation and its patented connecting system
- Option: hopper

PCM ECOMOINEAU™ MSH / MVA-FF

Cake pumps for highly viscous fluids

Performance:

- **Pressure:** 24 bars [348 PSI]
- **Flowrate:** from 0.003 m³/h to 300 m³/h [0.01 to 1320 USGPM]
- **Viscosity:** up to 1.000.000 cPo
- **Max solids content:** 40%

Benefits:

- Product integrity
- Constant and pulsation-free flowrate
- Easy and quick maintenance
- Manual or gravity feeding through the enlarged hopper coupled with an Archimede screw

PCM ECOMOINEAU™ MF

Space and time saving

Performance:

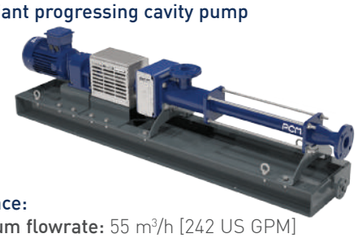
- **Pressure:** 10 bars [145 PSI]
- **Flowrate:** from 10 l/h to 6 m³/h [0.04 to 26.4 USGPM]
- **Particles size:** 8 mm [0.3 inch]
- **Range:** 8 models

Benefits:

- Compact, easy integration
- Low life cycle costs
- Quick and simplified maintenance

PCM MOINEAU™ A

API compliant progressing cavity pump



Performance:

- **Maximum flowrate:** 55 m³/h [242 US GPM]
- **Maximum differential pressure:** 24 bar [350 PSI]
- **Maximum fluid temperature:** 130°c [265 °F]
- **Minimum fluid temperature:** -12°c [10° F]
- **Maximum fluid viscosity:** 10 000 cP
- **Ambient temperature range:** -40°c to +55° c [-40° F to +130° F]

PERISTALTIC PUMPS

PCM Delasco™

PCM DX SERIES

Versatility: abrasive, corrosive, shear sensitive fluids

Performance:

- **Pressure:** 15 bars [218 PSI]
- **Flowrate:** from 30 l/h to 100 m³/h [0.13 to 440 USGPM]
- **Viscosity:** 40 000 cPo

Benefits:

- Self-priming
- Reversibility
- Robustness
- Seal-less design

PCM Z SERIES

Versatility and low life cycle costs

Performance:

- **Pressure:** 1.5 bars [22 PSI]
- **Flowrate:** from 30 l/h to 20 m³/h [0.13 to 88 SUGPM]
- **Viscosity:** 15 000 cPo

Benefits:

- Self-priming
- Reversibility
- Dry running
- Easy and quick maintenance

PCM PMA SERIES

Dosing and transfer of low flowrates

Performance:

- **Pressure:** 1,5 bars [22 PSI]
- **Flowrate:** from 10 l/h to 200 l/h [0.04 to 0.88 USGPM]
- **Viscosity:** 1 800 cPo

Benefits:

- Self-priming
- Robust
- Easy and quick maintenance

DELASCO™ TECHNOLOGY PRINCIPLE

The ideal choice to reduce maintenance costs

The peristaltic principle is based on the capacity of a soft elastomer hose to accept a deformation and subsequently draw fluids as it recovers its initial shape. The optimum hose occlusion prevents back flow, preserving fragile products integrity as well as providing unbeatable volumetric efficiency and accuracy. With only the hose in contact with the fluids, peristaltic pumps are ideal for a large variety of fluids while always keeping maintenance costs to a minimum.

DIAPHRAGM DOSING PUMPS

PCM LAGOA™

Diaphragm dosing pumps

Performance:

- **Pressure:** 12 bars [174 PSI]
- **Flowrate:** from 0.5 l/h to 315 l/h [83.2 GPH] per pumphead
- **Accuracy:** +/- 1%

Benefits:

- Simple and robust
- Reliable
- Versatility
- Reduced maintenance

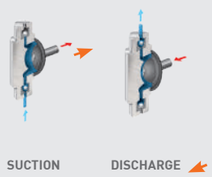
LAGOA™ TECHNOLOGY PRINCIPLE

Accuracy and reliability: ingredients of a successful dosing

The Lagoa™ pump is composed of a membrane connected to a piston which alternating movement successively fills and empties the pumphead.

1- The backward movement of the membrane opens the bottom check valve and allows the entry of fluid, which fills the pumphead.

2- The forward movement of the membrane closes the bottom check valve, opens the top check valve and expels the dose.



APPLICATIONS

Upstream

Multiphase Booster
- Boosting full well-stream (oil + water + gas) to a process facility

Well services
- Well testing > crude oil transfer
- Drilling mud > decanter centrifuge feeding

Oil & Gas processing
- Flare KO drum emptying
- Crude oil transfer
- Hydrocarbon condensate transfer
- Rich MEG / glycol
- Hydrocarbon sludge

Produced water management
- Produced water transfer
- Skimmed oil transfer

Enhanced oil recovery
- EOR polymer transfer
- Surfactant transfer

Downstream

Refinery & petrochemical
- Open & closed drains transfer
- Slop oil
- Oily water treatment
- Hydrocarbon sludge
- Catalyst slurry

Storage & Distribution
- Crude oil transfer
- Oily sludge

Other industries

- Sludge drainage (environment)
- Filter-press feeding (mines and quarries)
- Starch transfer (paper)
- Biomass circulation (new energies)
- Polymer production (chemistry)
- Used oil treatment (mechanics)

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